Read counting for the 2016-17 cohort

EJC

25/06/2020, based on code from May 2019

The Babraham compute cluster does not contain a global tex installation, so a local tex is added to \$PATH to allow knitting to pdf.

```
Sys.setenv(PATH=paste(Sys.getenv("PATH"),
                       "/bi/home/carre/texlive/2017/bin/x86_64-linux/",sep=":"))
## This code will need modification to reflect local file structure.
fls <- list.files(</pre>
  # on BI cluster all sequencing data is stored:
   path = "/bi/sequencing/",
     # This gets all hisat2 aligned bams
     pattern = "hisat2.bam",
       # Look in all subdirectories
    recursive = T,
       # Get full path:
      full.names = T)
# We only want ALFNA samples
# [ignore other BI sequencing projects shared with me]
fls <- fls [ grepl(fls, pattern = "ALFNA")]</pre>
# Select the HA+ B cell data:
fls <- fls [ grepl(fls, pattern = "HA")]</pre>
# Remove the pilot sample, 160Y_d42 from ALFNA14.
fls <- fls [ ! grepl(fls, pattern = "160Y")]</pre>
bam <- basename(fls)</pre>
ifelse(
  any(grepl(list.dirs(), pattern = "/data")),
  "Data directory already exists",
  # Data directory should be made:
  system("mkdir data"))
## [1] "Data directory already exists"
save(bam, fls, file = "data/bam_fls_paths.RData")
library(Rsubread)
counts <- featureCounts(files = fls,</pre>
                          ## change this path to your local gtf:
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          Rsubread 2.0.0
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                 Input files : 960 BAM files
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##	o lane6963_CTCTCTAC_AAGGAGTA_cDNA190807_D7_5
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##	o lane6963_GGACTCCT_TCTCTCCG_cDNA190807_A5_5
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##	o lane6967_CTCTCTAC_CTCTCTAT_cDNA190820_H7_5
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##	o lane6967_CTCTCTAC_TCTCTCCG_cDNA190820_A7_5
##	o lane6967_GCTCATGA_AAGGAGTA_cDNA190820_D11
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##	o lane6967_GCTCATGA_CTAAGCCT_cDNA190820_C11
##	o lane6967_GCTCATGA_CTCTCTAT_cDNA190820_H11
##	o lane6967_GCTCATGA_GTAAGGAG_cDNA190820_F11
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##	o lane6967_GCTCATGA_TCTCTCCG_cDNA190820_A11
## ##	o lane6967_GGACTCCT_AAGGAGTA_cDNA190820_D5_5
## ##	o lane6967_GGACTCCT_ACTGCATA_cDNA190820_E5_5
## ##	o lane6967_GGACTCCT_ACTGCATA_CDNA190820_E5_5
## ##	o lane6967_GGACTCCT_CTAAGCCT_cDNA190820_C5_5
## ##	o lane6967_GGACTCCT_CTAAGCCT_CDNA190820_C5_5
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##	o lane7055_CGTACTAG_AAGGAGTA_lib190910_D2_50

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## ||
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## ||
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##
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  - 1 1
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##
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  Ш
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  \Box
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## ||
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##
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##
  -11
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##
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##
   - 1 1
                                 o lane7023_ATCTCAGG_TATCCTCT_cDNA190917_G12_ ... ||
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##
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##
  \Box
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## ||
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##
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   | | |
##
   \Box
                                 o lane7023_GGACTCCT_GTAAGGAG_cDNA190917_F5_6 ... ||
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##
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##
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  - 1 1
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##
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##
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##
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  \Box
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   | | |
##
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## ||
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## ||
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                                   lane7035_GTAGAGGA_TCTCTCCG_cDNA190919_A10_ ... ||
##
                                   lane7035_TAAGGCGA_AAGGAGTA_cDNA190919_D1_5 ... ||
   | | |
##
   \Box
                                   lane7035_TAAGGCGA_ACTGCATA_cDNA190919_E1_5 ... ||
##
  - 1 1
                                  o lane7035 TAAGGCGA CGTCTAAT cDNA190919 B1 5 ... ||
##
  - 1 1
                                   lane7035 TAAGGCGA CTAAGCCT cDNA190919 C1 5 ... ||
##
  - 1 1
                                   lane7035_TAAGGCGA_CTCTCTAT_cDNA190919_H1_5 ... ||
##
   II
                                   lane7035_TAAGGCGA_GTAAGGAG_cDNA190919_F1_5 ... ||
##
   lane7035_TAAGGCGA_TATCCTCT_cDNA190919_G1_5 ... ||
   | | |
                                   lane7035_TAAGGCGA_TCTCTCCG_cDNA190919_A1_5 ... ||
                                   lane7035_TAGGCATG_AAGGAGTA_cDNA190919_D6_5 ... ||
##
##
                                   lane7035_TAGGCATG_ACTGCATA_cDNA190919_E6_5 ... ||
   - 1 1
##
  - 1 1
                                   lane7035_TAGGCATG_CGTCTAAT_cDNA190919_B6_5 ... |
                                   lane7035_TAGGCATG_CTAAGCCT_cDNA190919_C6_5 ... ||
## ||
##
                                   lane7035_TAGGCATG_CTCTCTAT_cDNA190919_H6_5 ... ||
##
   | | |
                                   lane7035_TAGGCATG_GTAAGGAG_cDNA190919_F6_5 ... ||
                                   lane7035 TAGGCATG TATCCTCT cDNA190919 G6 5 ... ||
##
                                   lane7035_TAGGCATG_TCTCTCCG_cDNA190919_A6_5 ... ||
   ш
##
   - 1 1
                                   lane7035_TCCTGAGC_AAGGAGTA_cDNA190919_D4_5 ... ||
##
  - 1 1
                                   lane7035_TCCTGAGC_ACTGCATA_cDNA190919_E4_5 ... ||
                                   lane7035_TCCTGAGC_CGTCTAAT_cDNA190919_B4_5 ... ||
## ||
                                   lane7035_TCCTGAGC_CTAAGCCT_cDNA190919_C4_5 ... ||
## ||
##
  - 1 1
                                 o lane7035 TCCTGAGC CTCTCTAT cDNA190919 H4 5 ... ||
##
  Ш
                                   lane7035 TCCTGAGC GTAAGGAG cDNA190919 F4 5 ... ||
  -11
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                                   lane7035_TCCTGAGC_TCTCTCCG_cDNA190919_A4_5 ... ||
##
   ##
   | | |
                                   lane7043_AAGAGGCA_AAGGAGTA_cDNA190920_D9_6 ... ||
##
  | | |
                                   lane7043_AAGAGGCA_ACTGCATA_cDNA190920_E9_6 ... ||
##
                                   lane7043_AAGAGGCA_CGTCTAAT_cDNA190920_B9_6 ... ||
  - 1 1
##
                                   lane7043_AAGAGGCA_CTAAGCCT_cDNA190920_C9_6 ... |
##
   -11
                                   lane7043_AAGAGGCA_CTCTCTAT_cDNA190920_H9_6 ... ||
##
   | | |
                                   lane7043_AAGAGGCA_GTAAGGAG_cDNA190920_F9_6 ... ||
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##
   - 1 1
                                   lane7043_AAGAGGCA_TCTCTCCG_cDNA190920_A9_6 ... ||
##
##
   - 1 1
                                 o lane7043_AGGCAGAA_AAGGAGTA_cDNA190920_D3_5 ... ||
##
  - 1 1
                                   lane7043 AGGCAGAA ACTGCATA cDNA190920 E3 5 ... ||
## ||
                                   lane7043_AGGCAGAA_CGTCTAAT_cDNA190920_B3_5 ... ||
  \Box
                                   lane7043_AGGCAGAA_CTAAGCCT_cDNA190920_C3_5 ... ||
##
##
  - 1 1
                                  o lane7043_AGGCAGAA_CTCTCTAT_cDNA190920_H3_5 ... ||
##
  | | |
                                   lane7043 AGGCAGAA GTAAGGAG cDNA190920 F3 5 ... ||
                                   lane7043_AGGCAGAA_TATCCTCT_cDNA190920_G3_5 ... ||
##
   | | |
##
   - 1 1
                                   lane7043_AGGCAGAA_TCTCTCCG_cDNA190920_A3_5 ... ||
##
                                   lane7043_ATCTCAGG_AAGGAGTA_cDNA190920_D12_ ... ||
  | | |
## ||
                                   lane7043_ATCTCAGG_ACTGCATA_cDNA190920_E12_ ... ||
                                   lane7043_ATCTCAGG_CGTCTAAT_cDNA190920_B12_ ... ||
## ||
##
  -11
                                   lane7043_ATCTCAGG_CTAAGCCT_cDNA190920_C12_ ... ||
##
  ш
                                   lane7043_ATCTCAGG_CTCTCTAT_cDNA190920_H12_ ... ||
##
  -11
                                   lane7043_ATCTCAGG_GTAAGGAG_cDNA190920_F12_ ... ||
##
                                   lane7043_ATCTCAGG_TATCCTCT_cDNA190920_G12_ ... ||
##
  -11
                                 o lane7043_ATCTCAGG_TCTCTCCG_cDNA190920_A12_ ... ||
## ||
                                  o lane7043_CGAGGCTG_AAGGAGTA_cDNA190920_D8_5 ... ||
## ||
                                 o lane7043_CGAGGCTG_ACTGCATA_cDNA190920_E8_5 ... ||
## ||
                                  o lane7043 CGAGGCTG CGTCTAAT cDNA190920 B8 5 ... ||
```

```
## ||
                                 o lane7043_CGAGGCTG_CTAAGCCT_cDNA190920_C8_5 ... ||
## ||
                                 o lane7043_CGAGGCTG_CTCTCTAT_cDNA190920_H8_5 ... ||
  - 1 1
                                   lane7043 CGAGGCTG GTAAGGAG cDNA190920 F8 5 ... ||
##
                                   lane7043_CGAGGCTG_TATCCTCT_cDNA190920_G8_5 ... ||
   | | |
##
   \Box
                                 o lane7043_CGAGGCTG_TCTCTCCG_cDNA190920_A8_6 ... ||
##
                                 o lane7043 CGTACTAG AAGGAGTA cDNA190920 D2 5 ... ||
  ш
                                   lane7043 CGTACTAG ACTGCATA cDNA190920 E2 5 ... ||
## ||
                                   lane7043_CGTACTAG_CGTCTAAT_cDNA190920_B2_5 ... ||
## ||
##
   II
                                   lane7043_CGTACTAG_CTAAGCCT_cDNA190920_C2_5 ... ||
##
   lane7043_CGTACTAG_CTCTCTAT_cDNA190920_H2_5 ... ||
  \Box
                                   lane7043_CGTACTAG_GTAAGGAG_cDNA190920_F2_5 ... ||
                                   lane7043_CGTACTAG_TATCCTCT_cDNA190920_G2_5 ... ||
##
##
                                 o lane7043_CGTACTAG_TCTCTCCG_cDNA190920_A2_5 ... ||
   - 1 1
## ||
                                   lane7043_CTCTCTAC_AAGGAGTA_cDNA190920_D7_5 ... ||
                                   lane7043_CTCTCTAC_ACTGCATA_cDNA190920_E7_5 ... ||
## ||
## ||
                                   lane7043_CTCTCTAC_CGTCTAAT_cDNA190920_B7_5 ... ||
##
  -11
                                   lane7043_CTCTCTAC_CTAAGCCT_cDNA190920_C7_5 ... ||
                                   lane7043 CTCTCTAC CTCTCTAT cDNA190920 H7 5 ... ||
##
                                   lane7043_CTCTCTAC_GTAAGGAG_cDNA190920_F7_5 ... ||
  Ш
##
   - 1 1
                                   lane7043_CTCTCTAC_TATCCTCT_cDNA190920_G7_5 ... ||
##
  - 1 1
                                 o lane7043_CTCTCTAC_TCTCTCCG_cDNA190920_A7_6 ... ||
## ||
                                   lane7043_GCTCATGA_AAGGAGTA_cDNA190920_D11_ ... ||
                                   lane7043_GCTCATGA_ACTGCATA_cDNA190920_E11_ ... ||
## ||
##
  - 1 1
                                 o lane7043_GCTCATGA_CGTCTAAT_cDNA190920_B11_ ... ||
##
  - 1 1
                                 o lane7043_GCTCATGA_CTAAGCCT_cDNA190920_C11_ ... ||
  -11
                                   lane7043_GCTCATGA_CTCTCTAT_cDNA190920_H11_ ... ||
                                   lane7043_GCTCATGA_GTAAGGAG_cDNA190920_F11_ ... ||
##
   ##
   | | |
                                 o lane7043_GCTCATGA_TATCCTCT_cDNA190920_G11_ ... ||
## ||
                                 o lane7043_GCTCATGA_TCTCTCCG_cDNA190920_A11_ ... ||
## ||
                                   lane7043_GGACTCCT_AAGGAGTA_cDNA190920_D5_5 ... ||
## ||
                                   lane7043_GGACTCCT_ACTGCATA_cDNA190920_E5_5 ... ||
##
  - 1 1
                                   lane7043_GGACTCCT_CGTCTAAT_cDNA190920_B5_5 ... ||
##
   | | |
                                   lane7043_GGACTCCT_CTAAGCCT_cDNA190920_C5_5 ... ||
                                   lane7043_GGACTCCT_CTCTCTAT_cDNA190920_H5_5 ... ||
##
   - 1 1
                                   lane7043_GGACTCCT_GTAAGGAG_cDNA190920_F5_5 ... ||
##
##
  - 1 1
                                 o lane7043_GGACTCCT_TATCCTCT_cDNA190920_G5_5 ... ||
## ||
                                 o lane7043 GGACTCCT TCTCTCCG cDNA190920 A5 5 ... ||
## ||
                                   lane7043_GTAGAGGA_AAGGAGTA_cDNA190920_D10_ ... ||
  \Box
                                 o lane7043_GTAGAGGA_ACTGCATA_cDNA190920_E10_ ... ||
##
##
  - 1 1
                                 o lane7043_GTAGAGGA_CGTCTAAT_cDNA190920_B10_ ... ||
  | | |
                                   lane7043 GTAGAGGA CTAAGCCT cDNA190920 C10 ... ||
                                   lane7043_GTAGAGGA_CTCTCTAT_cDNA190920_H10_ ... ||
##
   | | |
##
  - 1 1
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## ||
                                 o lane7043_GTAGAGGA_TATCCTCT_cDNA190920_G10_ ... ||
## ||
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## ||
## ||
                                   lane7043_TAAGGCGA_ACTGCATA_cDNA190920_E1_5 ... ||
##
  \Box
                                   lane7043_TAAGGCGA_CGTCTAAT_cDNA190920_B1_5 ... |
##
  \Box
                                   lane7043_TAAGGCGA_CTAAGCCT_cDNA190920_C1_5 ... ||
##
                                   lane7043_TAAGGCGA_CTCTCTAT_cDNA190920_H1_5 ... ||
##
  -11
                                 o lane7043_TAAGGCGA_GTAAGGAG_cDNA190920_F1_5 ... ||
## ||
                                 o lane7043_TAAGGCGA_TATCCTCT_cDNA190920_G1_5 ... ||
## ||
                                 o lane7043_TAAGGCGA_TCTCTCCG_cDNA190920_A1_5 ... ||
## ||
                                 o lane7043 TAGGCATG AAGGAGTA cDNA190920 D6 5 ... ||
```

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## ||
                                 o lane7043_TAGGCATG_ACTGCATA_cDNA190920_E6_5 ... ||
##
  - 1 1
                                 o lane7043_TAGGCATG_CGTCTAAT_cDNA190920_B6_5 ... ||
   - 1 1
                                   lane7043 TAGGCATG CTAAGCCT cDNA190920 C6 5 ... ||
##
                                   lane7043_TAGGCATG_CTCTCTAT_cDNA190920_H6_5 ... ||
   | | |
##
   \Box
                                   lane7043_TAGGCATG_GTAAGGAG_cDNA190920_F6_5 ... ||
                                   lane7043 TAGGCATG TATCCTCT cDNA190920 G6 5 ... ||
##
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##
  - 1 1
                                   lane7043 TAGGCATG TCTCTCCG cDNA190920 A6 5 ... ||
##
  - 1 1
                                   lane7043_TCCTGAGC_AAGGAGTA_cDNA190920_D4_5 ... ||
##
   II
                                   lane7043_TCCTGAGC_ACTGCATA_cDNA190920_E4_5 ... ||
##
   lane7043_TCCTGAGC_CGTCTAAT_cDNA190920_B4_5 ... ||
                                   lane7043_TCCTGAGC_CTAAGCCT_cDNA190920_C4_5 ... ||
   - 1 1
                                   lane7043_TCCTGAGC_CTCTCTAT_cDNA190920_H4_5 ... ||
##
##
                                   lane7043_TCCTGAGC_GTAAGGAG_cDNA190920_F4_5 ... ||
   - 1 1
                                   lane7043_TCCTGAGC_TATCCTCT_cDNA190920_G4_5 ... ||
##
  - 1 1
                                   lane7043_TCCTGAGC_TCTCTCCG_cDNA190920_A4_5 ... ||
## ||
##
                                   lane7048_AAGAGGCA_AAGGAGTA_cDNA190921_D9_6 ... ||
##
   | | |
                                   lane7048_AAGAGGCA_ACTGCATA_cDNA190921_E9_6 ... ||
                                   lane7048 AAGAGGCA CGTCTAAT cDNA190921 B9 6 ... ||
##
                                   lane7048_AAGAGGCA_CTAAGCCT_cDNA190921_C9_6 ... ||
   ш
##
   - 1 1
                                   lane7048_AAGAGGCA_CTCTCTAT_cDNA190921_H9_6 ... ||
##
  - 1 1
                                   lane7048_AAGAGGCA_GTAAGGAG_cDNA190921_F9_6 ... ||
                                   lane7048_AAGAGGCA_TATCCTCT_cDNA190921_G9_6 ... ||
## ||
                                   lane7048_AAGAGGCA_TCTCTCCG_cDNA190921_A9_6 ... ||
## ||
##
  - 1 1
                                 o lane7048_AGGCAGAA_AAGGAGTA_cDNA190921_D3_6 ... ||
##
  Ш
                                   lane7048 AGGCAGAA ACTGCATA cDNA190921 E3 6 ... ||
  -11
                                   lane7048_AGGCAGAA_CGTCTAAT_cDNA190921_B3_6 ... ||
                                   lane7048_AGGCAGAA_CTAAGCCT_cDNA190921_C3_6 ... ||
##
   ##
   | | |
                                   lane7048_AGGCAGAA_CTCTCTAT_cDNA190921_H3_6 ... ||
##
  | | |
                                   lane7048_AGGCAGAA_GTAAGGAG_cDNA190921_F3_6 ... ||
##
                                   lane7048_AGGCAGAA_TATCCTCT_cDNA190921_G3_6 ... ||
  - 1 1
## ||
                                   lane7048_AGGCAGAA_TCTCTCCG_cDNA190921_A3_6 ... |
##
   -11
                                   lane7048_ATCTCAGG_AAGGAGTA_cDNA190921_D12_ ... ||
##
   | | |
                                   lane7048_ATCTCAGG_ACTGCATA_cDNA190921_E12_ ... ||
                                   lane7048_ATCTCAGG_CGTCTAAT_cDNA190921_B12_ ... ||
##
   - 1 1
                                   lane7048_ATCTCAGG_CTAAGCCT_cDNA190921_C12_ ... ||
##
##
   - 1 1
                                 o lane7048_ATCTCAGG_CTCTCTAT_cDNA190921_H12_ ... ||
##
  - 1 1
                                   lane7048 ATCTCAGG GTAAGGAG cDNA190921 F12 ... ||
## ||
                                   lane7048_ATCTCAGG_TATCCTCT_cDNA190921_G12_ ... ||
  \Box
##
                                   lane7048_ATCTCAGG_TCTCTCCG_cDNA190921_A12_ ... ||
##
  - 1 1
                                   lane7048_CGAGGCTG_AAGGAGTA_cDNA190921_D8_6 ... ||
                                   lane7048 CGAGGCTG ACTGCATA cDNA190921 E8 6 ... ||
##
  | | |
                                   lane7048_CGAGGCTG_CGTCTAAT_cDNA190921_B8_6 ... ||
##
   | | |
##
   - 1 1
                                   lane7048_CGAGGCTG_CTAAGCCT_cDNA190921_C8_6 ... ||
##
                                   lane7048_CGAGGCTG_CTCTCTAT_cDNA190921_H8_6 ... ||
  | | |
## ||
                                   lane7048_CGAGGCTG_GTAAGGAG_cDNA190921_F8_6 ... ||
                                   lane7048_CGAGGCTG_TATCCTCT_cDNA190921_G8_6 ... ||
## ||
##
  -11
                                   lane7048_CGAGGCTG_TCTCTCCG_cDNA190921_A8_6 ... ||
##
  ш
                                   lane7048_CGTACTAG_AAGGAGTA_cDNA190921_D2_5 ... |
##
  -11
                                   lane7048_CGTACTAG_ACTGCATA_cDNA190921_E2_5 ... ||
##
                                   lane7048_CGTACTAG_CGTCTAAT_cDNA190921_B2_5 ... ||
##
  -11
                                 o lane7048_CGTACTAG_CTAAGCCT_cDNA190921_C2_5 ... ||
## ||
                                 o lane7048_CGTACTAG_CTCTCTAT_cDNA190921_H2_5 ... ||
## ||
                                 o lane7048_CGTACTAG_GTAAGGAG_cDNA190921_F2_5 ... ||
## ||
                                 o lane7048 CGTACTAG TATCCTCT cDNA190921 G2 5 ... ||
```

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## ||
                                 o lane7048_CGTACTAG_TCTCTCCG_cDNA190921_A2_5 ... ||
## ||
                                 o lane7048_CTCTCTAC_AAGGAGTA_cDNA190921_D7_6 ... ||
                                   lane7048 CTCTCTAC ACTGCATA cDNA190921 E7 6 ... ||
  -11
##
                                   lane7048_CTCTCTAC_CGTCTAAT_cDNA190921_B7_6 ... ||
   | | |
##
   \Box
                                 o lane7048_CTCTCTAC_CTAAGCCT_cDNA190921_C7_6 ... ||
                                 o lane7048 CTCTCTAC CTCTCTAT cDNA190921 H7 6 ... ||
##
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##
  - 1 1
                                   lane7048 CTCTCTAC GTAAGGAG cDNA190921 F7 6 ... ||
## ||
                                   lane7048_CTCTCTAC_TATCCTCT_cDNA190921_G7_6 ... ||
##
   II
                                   lane7048_CTCTCTAC_TCTCTCCG_cDNA190921_A7_6 ... ||
##
   lane7048_GCTCATGA_AAGGAGTA_cDNA190921_D11_ ... ||
                                   lane7048_GCTCATGA_ACTGCATA_cDNA190921_E11_ ... ||
  ш
                                   lane7048_GCTCATGA_CGTCTAAT_cDNA190921_B11_ ... ||
##
##
                                 o lane7048_GCTCATGA_CTAAGCCT_cDNA190921_C11_ ... ||
   - 1 1
## ||
                                   lane7048_GCTCATGA_CTCTCTAT_cDNA190921_H11_ ... ||
                                   lane7048_GCTCATGA_GTAAGGAG_cDNA190921_F11_ ... ||
## ||
##
                                   lane7048_GCTCATGA_TATCCTCT_cDNA190921_G11_ ... ||
##
  -11
                                   lane7048_GCTCATGA_TCTCTCCG_cDNA190921_A11_ ... ||
                                   lane7048 GGACTCCT AAGGAGTA cDNA190921 D5 6 ... ||
##
                                   lane7048_GGACTCCT_ACTGCATA_cDNA190921_E5_6 ... ||
   ш
##
   - 1 1
                                   lane7048_GGACTCCT_CGTCTAAT_cDNA190921_B5_6 ... ||
##
  - 1 1
                                 o lane7048_GGACTCCT_CTAAGCCT_cDNA190921_C5_6 ... ||
                                   lane7048_GGACTCCT_CTCTCTAT_cDNA190921_H5_6 ... ||
## ||
## ||
                                   lane7048_GGACTCCT_GTAAGGAG_cDNA190921_F5_6 ... ||
##
  - 1 1
                                 o lane7048_GGACTCCT_TATCCTCT_cDNA190921_G5_6 ... ||
##
  - 1 1
                                 o lane7048_GGACTCCT_TCTCTCCG_cDNA190921_A5_6 ... ||
  -11
                                   lane7048_GTAGAGGA_AAGGAGTA_cDNA190921_D10_ ... ||
                                   lane7048_GTAGAGGA_ACTGCATA_cDNA190921_E10_ ... ||
##
   ##
   | | |
                                 o lane7048_GTAGAGGA_CGTCTAAT_cDNA190921_B10_ ... ||
##
  | | |
                                 o lane7048_GTAGAGGA_CTAAGCCT_cDNA190921_C10_ ... ||
## ||
                                   lane7048_GTAGAGGA_CTCTCTAT_cDNA190921_H10_ ... ||
## ||
                                   lane7048_GTAGAGGA_GTAAGGAG_cDNA190921_F10_ ... ||
##
  - 1 1
                                   lane7048_GTAGAGGA_TATCCTCT_cDNA190921_G10_ ... ||
##
   | | |
                                   lane7048_GTAGAGGA_TCTCTCCG_cDNA190921_A10_ ... ||
                                   lane7048_TAAGGCGA_AAGGAGTA_cDNA190921_D1_5 ... ||
##
   - 1 1
                                   lane7048_TAAGGCGA_ACTGCATA_cDNA190921_E1_5 ... ||
##
##
  - 1 1
                                 o lane7048_TAAGGCGA_CGTCTAAT_cDNA190921_B1_5 ... ||
## ||
                                 o lane7048 TAAGGCGA CTAAGCCT cDNA190921 C1 5 ... ||
## ||
                                   lane7048_TAAGGCGA_CTCTCTAT_cDNA190921_H1_5 ... ||
  \Box
                                 o lane7048_TAAGGCGA_GTAAGGAG_cDNA190921_F1_5 ... ||
##
##
  - 1 1
                                 o lane7048_TAAGGCGA_TATCCTCT_cDNA190921_G1_5 ... ||
##
  | | |
                                   lane7048_TAAGGCGA_TCTCTCCG_cDNA190921_A1_5 ... ||
                                   lane7048_TAGGCATG_AAGGAGTA_cDNA190921_D6_6 ... ||
##
   | | |
##
   - 1 1
                                 o lane7048_TAGGCATG_ACTGCATA_cDNA190921_E6_6 ... ||
## ||
                                   lane7048_TAGGCATG_CGTCTAAT_cDNA190921_B6_6 ... ||
## ||
                                   lane7048_TAGGCATG_CTAAGCCT_cDNA190921_C6_6 ... ||
## ||
                                   lane7048_TAGGCATG_CTCTCTAT_cDNA190921_H6_6 ... ||
## ||
                                   lane7048_TAGGCATG_GTAAGGAG_cDNA190921_F6_6 ... ||
##
  ш
                                   lane7048_TAGGCATG_TATCCTCT_cDNA190921_G6_6 ... |
##
  -11
                                   lane7048_TAGGCATG_TCTCTCCG_cDNA190921_A6_6 ... ||
##
                                   lane7048_TCCTGAGC_AAGGAGTA_cDNA190921_D4_6 ... ||
                                 o lane7048_TCCTGAGC_ACTGCATA_cDNA190921_E4_6 ... ||
##
  -11
## ||
                                 o lane7048_TCCTGAGC_CGTCTAAT_cDNA190921_B4_6 ... ||
## ||
                                 o lane7048_TCCTGAGC_CTAAGCCT_cDNA190921_C4_6 ... ||
## ||
                                 o lane7048 TCCTGAGC CTCTCTAT cDNA190921 H4 6 ... ||
```

```
## ||
                              o lane7048 TCCTGAGC GTAAGGAG cDNA190921 F4 6 ... ||
## ||
                              o lane7048_TCCTGAGC_TATCCTCT_cDNA190921_G4_6 ... ||
                              o lane7048_TCCTGAGC_TCTCTCCG_cDNA190921_A4_6 ... ||
## ||
## ||
                 Annotation: Homo_sapiens.GRCh38.87.gtf (GTF)
                                                                             | |
          Dir for temp files : .
## ||
                                                                             | | |
## ||
                     Threads: 7
                                                                             II
                       Level : meta-feature level
## ||
                                                                             II
## ||
                  Paired-end: no
                                                                             \Pi
## ||
          Multimapping reads : counted
                                                                             П
## || Multi-overlapping reads : not counted
                                                                             \Pi
       Min overlapping bases : 1
                                                                             | |
## ||
                                                                             II
## ||
                                                                             \Pi
## || Load annotation file Homo_sapiens.GRCh38.87.gtf ...
                                                                             \Pi
      Features : 1182163
                                                                             \Pi
## ||
        Meta-features : 58051
                                                                             II
## ||
        Chromosomes/contigs: 47
                                                                             \Pi
                                                                             | |
## || Process BAM file lane6963_AAGAGGCA_AAGGAGTA_cDNA190807_D9_594V_d42_L00 ... ||
        WARNING: Paired-end reads were found.
## ||
                                                                             II
## ||
        Total alignments: 2580798
                                                                             | |
## ||
        Successfully assigned alignments: 2101877 (81.4%)
                                                                             II
        Running time : 0.04 minutes
                                                                             \Pi
## ||
## ||
                                                                             \Pi
## || Process BAM file lane6963_AAGAGGCA_ACTGCATA_cDNA190807_E9_594V_d42_L00 ... ||
## ||
        WARNING: Paired-end reads were found.
                                                                             \Pi
## ||
        Total alignments: 2144642
                                                                             II
## ||
        Successfully assigned alignments: 1710815 (79.8%)
                                                                             II
## ||
        Running time: 0.04 minutes
                                                                             П
## ||
                                                                             \Pi
## || Process BAM file lane6963_AAGAGGCA_CGTCTAAT_cDNA190807_B9_594V_d42_L00 ... ||
        WARNING: Paired-end reads were found.
## ||
                                                                             11
## ||
        Total alignments: 6348452
                                                                             II
## ||
        Successfully assigned alignments: 4728794 (74.5%)
                                                                             II
## ||
        Running time : 0.09 minutes
                                                                             II
## ||
                                                                             | |
## || Process BAM file lane6963 AAGAGGCA CTAAGCCT cDNA190807 C9 594V d42 L00 ... ||
        WARNING: Paired-end reads were found.
## ||
                                                                             | |
        Total alignments: 3017776
## ||
                                                                             II
        Successfully assigned alignments : 2440979 (80.9%)
## ||
                                                                             | |
## ||
        Running time : 0.05 minutes
                                                                             \Pi
## ||
                                                                             | |
## || Process BAM file lane6963_AAGAGGCA_CTCTCTAT_cDNA190807_H9_594V_d42_L00 ... ||
        WARNING: Paired-end reads were found.
                                                                             II
## ||
        Total alignments : 3833180
                                                                             II
        Successfully assigned alignments: 3039898 (79.3%)
## ||
                                                                             \Pi
## ||
        Running time : 0.06 minutes
                                                                             \Pi
## ||
                                                                             \Pi
## || Process BAM file lane6963_AAGAGGCA_GTAAGGAG_cDNA190807_F9_594V_d42_L00 ... ||
## ||
        WARNING: Paired-end reads were found.
                                                                             II
```

```
\prod
         Total alignments: 2423304
         Successfully assigned alignments : 1921064 (79.3%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_AAGAGGCA_TATCCTCT_cDNA190807_G9_594V_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2719662
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 2199891 (80.9%)
                                                                                    | |
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_AAGAGGCA_TCTCTCCG_cDNA190807_A9_594V_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 4162020
         Successfully assigned alignments: 3231862 (77.7%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_AGGCAGAA_AAGGAGTA_cDNA190807_D3_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1558612
                                                                                    II
## ||
         Successfully assigned alignments: 1154052 (74.0%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6963_AGGCAGAA_ACTGCATA_cDNA190807_E3_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1160692
## ||
         Successfully assigned alignments: 779406 (67.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \prod
## || Process BAM file lane6963_AGGCAGAA_CGTCTAAT_cDNA190807_B3_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 4483614
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3872851 (86.4%)
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane6963_AGGCAGAA_CTAAGCCT_cDNA190807_C3_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1315972
                                                                                    II
## ||
         Successfully assigned alignments: 818697 (62.2%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963 AGGCAGAA CTCTCTAT cDNA190807 H3 545R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1610
                                                                                    II
## ||
         Successfully assigned alignments : 23 (1.4%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.00 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_AGGCAGAA_GTAAGGAG_cDNA190807_F3_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1259890
                                                                                    II
         Successfully assigned alignments: 989923 (78.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6963_AGGCAGAA_TATCCTCT_cDNA190807_G3_545R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2491066
         Successfully assigned alignments : 2080051 (83.5%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_AGGCAGAA_TCTCTCCG_cDNA190807_A3_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2535122
                                                                                   \Pi
## ||
## ||
         Successfully assigned alignments: 1825301 (72.0%)
                                                                                    | |
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_ATCTCAGG_AAGGAGTA_cDNA190807_D12_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 5440648
## ||
                                                                                    II
         Successfully assigned alignments: 4242238 (78.0%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_ATCTCAGG_ACTGCATA_cDNA190807_E12_594V_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 2780520
                                                                                    II
## ||
         Successfully assigned alignments: 2135367 (76.8%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6963_ATCTCAGG_CGTCTAAT_cDNA190807_B12_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 9798096
## ||
         Successfully assigned alignments: 7790641 (79.5%)
                                                                                    II
## ||
         Running time : 0.12 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6963_ATCTCAGG_CTAAGCCT_cDNA190807_C12_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 8044246
                                                                                    \Pi
## ||
         Successfully assigned alignments: 6428868 (79.9%)
                                                                                    II
## ||
         Running time: 0.10 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane6963_ATCTCAGG_CTCTCTAT_cDNA190807_H12_594V_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 5079074
                                                                                    II
## ||
         Successfully assigned alignments: 3986080 (78.5%)
                                                                                    II
## ||
         Running time: 0.07 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963 ATCTCAGG GTAAGGAG cDNA190807 F12 594V d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 3246166
                                                                                    II
## ||
         Successfully assigned alignments : 2500935 (77.0%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_ATCTCAGG_TATCCTCT_cDNA190807_G12_594V_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 6179136
                                                                                    II
         Successfully assigned alignments: 4745444 (76.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.08 minutes
                                                                                    \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane6963_ATCTCAGG_TCTCTCCG_cDNA190807_A12_594V_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
```

```
\prod
         Total alignments: 2364
## ||
         Successfully assigned alignments: 99 (4.2%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_CGAGGCTG_AAGGAGTA_cDNA190807_D8_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2695762
## ||
                                                                                    II
         Successfully assigned alignments : 2182491 (81.0%)
                                                                                    | |
## ||
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CGAGGCTG_ACTGCATA_cDNA190807_E8_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1474826
                                                                                    II
         Successfully assigned alignments: 1258477 (85.3%)
## ||
                                                                                    П
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CGAGGCTG_CGTCTAAT_cDNA190807_B8_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 4092372
                                                                                    II
## ||
         Successfully assigned alignments: 3042074 (74.3%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6963_CGAGGCTG_CTAAGCCT_cDNA190807_C8_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2593344
## ||
         Successfully assigned alignments: 2042220 (78.7%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CGAGGCTG_CTCTCTAT_cDNA190807_H8_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2710984
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2138931 (78.9%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CGAGGCTG_GTAAGGAG_cDNA190807_F8_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2033770
                                                                                    II
## ||
         Successfully assigned alignments: 1602718 (78.8%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6963 CGAGGCTG TATCCTCT cDNA190807 G8 594V d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2747574
                                                                                    II
## ||
         Successfully assigned alignments : 2151262 (78.3%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CGAGGCTG_TCTCTCCCG_cDNA190807_A8_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 5311484
                                                                                    \Pi
         Successfully assigned alignments: 4220297 (79.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.07 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6963_CGTACTAG_AAGGAGTA_cDNA190807_D2_545R_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 3060652
         Successfully assigned alignments : 2578642 (84.3%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_CGTACTAG_ACTGCATA_cDNA190807_E2_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2676760
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 2163855 (80.8%)
                                                                                    | |
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CGTACTAG_CGTCTAAT_cDNA190807_B2_545R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 4898950
         Successfully assigned alignments: 3923504 (80.1%)
## ||
                                                                                    П
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CGTACTAG_CTAAGCCT_cDNA190807_C2_545R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 3376474
                                                                                    II
## ||
         Successfully assigned alignments: 2929559 (86.8%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6963_CGTACTAG_CTCTCTAT_cDNA190807_H2_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 3577022
## ||
         Successfully assigned alignments: 2874478 (80.4%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \prod
                                                                                    \prod
## || Process BAM file lane6963_CGTACTAG_GTAAGGAG_cDNA190807_F2_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1980592
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1641556 (82.9%)
                                                                                    II
         Running time: 0.03 minutes
## ||
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane6963_CGTACTAG_TATCCTCT_cDNA190807_G2_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 3148744
                                                                                    II
## ||
         Successfully assigned alignments: 2641509 (83.9%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6963 CGTACTAG TCTCTCCG cDNA190807 A2 545R d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3866772
                                                                                    II
## ||
         Successfully assigned alignments : 3169975 (82.0%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CTCTCTAC_AAGGAGTA_cDNA190807_D7_594V_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1018424
                                                                                    II
         Successfully assigned alignments: 779251 (76.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6963_CTCTCTAC_ACTGCATA_cDNA190807_E7_594V_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1805656
         Successfully assigned alignments : 1310223 (72.6%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_CTCTCTAC_CGTCTAAT_cDNA190807_B7_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 4433980
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 2974763 (67.1%)
                                                                                    | |
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CTCTCTAC_CTAAGCCT_cDNA190807_C7_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2705152
                                                                                    II
         Successfully assigned alignments: 2207944 (81.6%)
## ||
                                                                                    П
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_CTCTCTAC_CTCTCTAT_cDNA190807_H7_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 1707170
                                                                                    II
## ||
         Successfully assigned alignments: 1275533 (74.7%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_CTCTCTAC_GTAAGGAG_cDNA190807_F7_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2537970
## ||
         Successfully assigned alignments: 2006136 (79.0%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6963_CTCTCTAC_TATCCTCT_cDNA190807_G7_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
         Total alignments: 2923856
## ||
                                                                                    \Pi
## ||
         Successfully assigned alignments : 2227660 (76.2%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane6963_CTCTCTAC_TCTCTCCG_cDNA190807_A7_594V_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3910168
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3115792 (79.7%)
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963 GCTCATGA AAGGAGTA cDNA190807 D11 594V d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4079976
                                                                                    II
## ||
         Successfully assigned alignments : 3354652 (82.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.06 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GCTCATGA_ACTGCATA_cDNA190807_E11_594V_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2701548
                                                                                    II
         Successfully assigned alignments: 2062516 (76.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6963_GCTCATGA_CGTCTAAT_cDNA190807_B11_594V_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 7249488
         Successfully assigned alignments : 5893070 (81.3\%)
## ||
                                                                                    II
## ||
         Running time: 0.09 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_GCTCATGA_CTAAGCCT_cDNA190807_C11_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 4455410
                                                                                    II
## ||
         Successfully assigned alignments: 3428728 (77.0%)
                                                                                    | |
## ||
## ||
         Running time: 0.07 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GCTCATGA_CTCTCTAT_cDNA190807_H11_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4558694
                                                                                    II
         Successfully assigned alignments: 3614677 (79.3%)
## ||
                                                                                    П
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GCTCATGA_GTAAGGAG_cDNA190807_F11_594V_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 2997254
                                                                                    II
## ||
         Successfully assigned alignments: 2396507 (80.0%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6963_GCTCATGA_TATCCTCT_cDNA190807_G11_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 4677252
## ||
         Successfully assigned alignments: 3698023 (79.1%)
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GCTCATGA_TCTCTCCG_cDNA190807_A11_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1306
                                                                                    \Pi
## ||
         Successfully assigned alignments: 66 (5.1%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GGACTCCT_AAGGAGTA_cDNA190807_D5_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 652
                                                                                    \Pi
## ||
         Successfully assigned alignments: 442 (67.8%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6963 GGACTCCT ACTGCATA cDNA190807 E5 545R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 110314
                                                                                    II
## ||
         Successfully assigned alignments : 82907 (75.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.01 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GGACTCCT_CGTCTAAT_cDNA190807_B5_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2532168
                                                                                    II
         Successfully assigned alignments: 2160656 (85.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GGACTCCT_CTAAGCCT_cDNA190807_C5_545R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 549514
         Successfully assigned alignments : 285159 (51.9%)
## ||
                                                                                    II
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_GGACTCCT_CTCTCTAT_cDNA190807_H5_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
         Total alignments: 2918
                                                                                    \Pi
## ||
         Successfully assigned alignments: 19 (0.7%)
                                                                                    | |
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GGACTCCT_GTAAGGAG_cDNA190807_F5_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 681520
         Successfully assigned alignments: 462710 (67.9%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GGACTCCT_TATCCTCT_cDNA190807_G5_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 676898
                                                                                    II
## ||
         Successfully assigned alignments: 429835 (63.5%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6963_GGACTCCT_TCTCTCCG_cDNA190807_A5_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
## ||
         Total alignments: 910
                                                                                    | |
## ||
         Successfully assigned alignments: 585 (64.3%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6963_GTAGAGGA_AAGGAGTA_cDNA190807_D10_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
         Total alignments: 3160242
## ||
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2588128 (81.9%)
                                                                                    II
         Running time: 0.05 minutes
                                                                                    \Pi
## ||
## ||
                                                                                    11
## || Process BAM file lane6963_GTAGAGGA_ACTGCATA_cDNA190807_E10_594V_d42 L0 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 971194
                                                                                    II
         Successfully assigned alignments : 818425 (84.3%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963 GTAGAGGA CGTCTAAT cDNA190807 B10 594V d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 3847146
                                                                                    II
## ||
         Successfully assigned alignments : 3082718 (80.1%)
                                                                                    \prod
## ||
         Running time : 0.06 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GTAGAGGA_CTAAGCCT_cDNA190807_C10_594V_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 4207660
                                                                                    II
         Successfully assigned alignments: 3461791 (82.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GTAGAGGA_CTCTCTAT_cDNA190807_H10_594V_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 4138524
         Successfully assigned alignments : 3310760 (80.0\%)
## ||
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_GTAGAGGA_GTAAGGAG_cDNA190807_F10_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 3071126
                                                                                    II
## ||
         Successfully assigned alignments : 2486977 (81.0%)
## ||
                                                                                    | |
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GTAGAGGA_TATCCTCT_cDNA190807_G10_594V_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4246076
                                                                                    II
         Successfully assigned alignments: 3351726 (78.9%)
## ||
                                                                                    П
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_GTAGAGGA_TCTCTCCG_cDNA190807_A10_594V_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 5825016
                                                                                    II
## ||
         Successfully assigned alignments: 4558533 (78.3%)
## ||
                                                                                    II
## ||
         Running time : 0.08 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6963_TAAGGCGA_AAGGAGTA_cDNA190807_D1_545R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2746398
## ||
         Successfully assigned alignments: 2229411 (81.2%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TAAGGCGA_ACTGCATA_cDNA190807_E1_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 948912
                                                                                    \Pi
## ||
         Successfully assigned alignments: 784901 (82.7%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane6963_TAAGGCGA_CGTCTAAT_cDNA190807_B1_545R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 4650576
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3915935 (84.2%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6963 TAAGGCGA CTAAGCCT cDNA190807 C1 545R d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2793498
                                                                                    II
## ||
         Successfully assigned alignments : 2295044 (82.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TAAGGCGA_CTCTCTAT_cDNA190807_H1_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2815894
                                                                                    II
         Successfully assigned alignments: 2438168 (86.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TAAGGCGA_GTAAGGAG_cDNA190807_F1_545R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1468858
         Successfully assigned alignments : 1254244 (85.4%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_TAAGGCGA_TATCCTCT_cDNA190807_G1_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2300506
## ||
                                                                                    II
         Successfully assigned alignments: 1938360 (84.3%)
                                                                                    | |
## ||
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TAAGGCGA_TCTCTCCG_cDNA190807_A1_545R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3983524
                                                                                    II
         Successfully assigned alignments: 3128717 (78.5%)
## ||
                                                                                    П
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TAGGCATG_AAGGAGTA_cDNA190807_D6_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 247238
                                                                                    II
## ||
         Successfully assigned alignments: 170279 (68.9%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane6963_TAGGCATG_ACTGCATA_cDNA190807_E6_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 644436
## ||
         Successfully assigned alignments: 471825 (73.2%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6963_TAGGCATG_CGTCTAAT_cDNA190807_B6_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1656910
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1110575 (67.0%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane6963_TAGGCATG_CTAAGCCT_cDNA190807_C6_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1755512
                                                                                    II
## ||
         Successfully assigned alignments: 1247824 (71.1%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6963 TAGGCATG CTCTCTAT cDNA190807 H6 545R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1718530
                                                                                    II
## ||
         Successfully assigned alignments : 1446229 (84.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TAGGCATG_GTAAGGAG_cDNA190807_F6_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 131828
                                                                                    II
         Successfully assigned alignments: 96491 (73.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6963_TAGGCATG_TATCCTCT_cDNA190807_G6_545R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2646484
## ||
         Successfully assigned alignments: 2080799 (78.6%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6963_TAGGCATG_TCTCTCCCG_cDNA190807_A6_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 3410454
## ||
                                                                                    II
         Successfully assigned alignments : 2422102 (71.0%)
                                                                                    | |
## ||
         Running time : 0.05 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TCCTGAGC_AAGGAGTA_cDNA190807_D4_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 240486
                                                                                    II
         Successfully assigned alignments: 170400 (70.9%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TCCTGAGC_ACTGCATA_cDNA190807_E4_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 181710
                                                                                    II
## ||
         Successfully assigned alignments: 135797 (74.7%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane6963_TCCTGAGC_CGTCTAAT_cDNA190807_B4_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2737056
                                                                                    | |
## ||
         Successfully assigned alignments: 2251524 (82.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TCCTGAGC_CTAAGCCT_cDNA190807_C4_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1118180
                                                                                    \Pi
## ||
         Successfully assigned alignments: 833309 (74.5%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TCCTGAGC_CTCTCTAT_cDNA190807_H4_545R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1576
                                                                                    II
## ||
         Successfully assigned alignments: 8 (0.5%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6963 TCCTGAGC GTAAGGAG cDNA190807 F4 545R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 62090
                                                                                    II
## ||
         Successfully assigned alignments : 45433 (73.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TCCTGAGC_TATCCTCT_cDNA190807_G4_545R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2476972
                                                                                    II
         Successfully assigned alignments: 2159088 (87.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6963_TCCTGAGC_TCTCTCCG_cDNA190807_A4_545R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2276068
         Successfully assigned alignments : 1718866 (75.5%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_AAGAGGCA_AAGGAGTA_cDNA190819_D9_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 636844
                                                                                    II
## ||
         Successfully assigned alignments: 463554 (72.8%)
                                                                                    | |
## ||
         Running time : 0.02 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AAGAGGCA_ACTGCATA_cDNA190819_E9_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 822
                                                                                    II
         Successfully assigned alignments: 477 (58.0%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AAGAGGCA_CGTCTAAT_cDNA190819_B9_562K_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments : 5093536
                                                                                    II
## ||
         Successfully assigned alignments: 3967635 (77.9%)
## ||
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6966_AAGAGGCA_CTAAGCCT_cDNA190819_C9_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 358
## ||
         Successfully assigned alignments: 109 (30.4%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AAGAGGCA_CTCTCTAT_cDNA190819_H9_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 5369492
                                                                                    \Pi
## ||
         Successfully assigned alignments: 4586969 (85.4%)
                                                                                    II
## ||
         Running time : 0.08 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AAGAGGCA_GTAAGGAG_cDNA190819_F9_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 837872
                                                                                    II
## ||
         Successfully assigned alignments: 590678 (70.5%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 AAGAGGCA TATCCTCT cDNA190819 G9 562K d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 659370
                                                                                    II
## ||
         Successfully assigned alignments : 460792 (69.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.02 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AAGAGGCA_TCTCTCCG_cDNA190819_A9_562K_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 19294
                                                                                    II
         Successfully assigned alignments : 12045 (62.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6966_AGGCAGAA_AAGGAGTA_cDNA190819_D3_543P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2926364
         Successfully assigned alignments : 2410050 (82.4%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_AGGCAGAA_ACTGCATA_cDNA190819_E3_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2669166
                                                                                    II
## ||
         Successfully assigned alignments : 2105940 (78.9%)
                                                                                    | |
## ||
         Running time : 0.04 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AGGCAGAA_CGTCTAAT_cDNA190819_B3_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4530104
                                                                                    II
         Successfully assigned alignments: 3781490 (83.5%)
                                                                                    \Pi
## ||
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AGGCAGAA_CTAAGCCT_cDNA190819_C3_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 3542118
                                                                                    II
## ||
         Successfully assigned alignments: 2993187 (84.5%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6966_AGGCAGAA_CTCTCTAT_cDNA190819_H3_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1297274
                                                                                    | |
## ||
         Successfully assigned alignments: 1060662 (81.8%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6966_AGGCAGAA_GTAAGGAG_cDNA190819_F3_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1282796
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1103421 (86.0%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_AGGCAGAA_TATCCTCT_cDNA190819_G3_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3085776
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2614843 (84.7%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 AGGCAGAA TCTCTCCG cDNA190819 A3 543P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3828448
                                                                                    II
## ||
         Successfully assigned alignments : 3222785 (84.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_ATCTCAGG_AAGGAGTA_cDNA190819_D12_562K_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 7126624
                                                                                    II
         Successfully assigned alignments: 5387315 (75.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.09 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_ATCTCAGG_ACTGCATA_cDNA190819_E12_562K_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 527122
         Successfully assigned alignments : 336898 (63.9\%)
## ||
                                                                                    II
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_ATCTCAGG_CGTCTAAT_cDNA190819_B12_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 13041768
## ||
                                                                                    II
         Successfully assigned alignments: 8472335 (65.0%)
                                                                                    | |
## ||
         Running time : 0.15 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_ATCTCAGG_CTAAGCCT_cDNA190819_C12_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 5282794
                                                                                    II
         Successfully assigned alignments: 3689489 (69.8%)
                                                                                    П
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
## || Process BAM file lane6966_ATCTCAGG_CTCTCTAT_cDNA190819_H12_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 7066274
                                                                                    II
## ||
         Successfully assigned alignments: 5747978 (81.3%)
## ||
                                                                                    II
## ||
         Running time : 0.09 minutes
                                                                                    II
                                                                                    | |
## || Process BAM file lane6966_ATCTCAGG_GTAAGGAG_cDNA190819_F12_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1126594
                                                                                    | |
## ||
         Successfully assigned alignments: 661406 (58.7%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6966_ATCTCAGG_TATCCTCT_cDNA190819_G12_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2723054
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1969780 (72.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6966_ATCTCAGG_TCTCTCCG_cDNA190819_A12_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 13248952
                                                                                    II
## ||
         Successfully assigned alignments: 10624978 (80.2%)
                                                                                    II
## ||
         Running time : 0.15 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 CGAGGCTG AAGGAGTA cDNA190819 D8 562K d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2796602
                                                                                    II
## ||
         Successfully assigned alignments : 2374096 (84.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGAGGCTG_ACTGCATA_cDNA190819_E8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2742592
                                                                                    \Pi
         Successfully assigned alignments: 2261577 (82.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGAGGCTG_CGTCTAAT_cDNA190819_B8_562K_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 415616
## ||
         Successfully assigned alignments: 315783 (76.0%)
                                                                                    II
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_CGAGGCTG_CTAAGCCT_cDNA190819_C8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 4509098
## ||
                                                                                    II
         Successfully assigned alignments: 3905612 (86.6%)
                                                                                    | |
## ||
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGAGGCTG_CTCTCTAT_cDNA190819_H8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 6203858
                                                                                    II
         Successfully assigned alignments: 5229887 (84.3%)
## ||
                                                                                    П
## ||
         Running time : 0.09 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGAGGCTG_GTAAGGAG_cDNA190819_F8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 2150394
                                                                                    II
## ||
         Successfully assigned alignments: 1791257 (83.3%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6966_CGAGGCTG_TATCCTCT_cDNA190819_G8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 461870
## ||
         Successfully assigned alignments: 359295 (77.8%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6966_CGAGGCTG_TCTCTCCG_cDNA190819_A8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 7867090
                                                                                    \Pi
## ||
         Successfully assigned alignments: 6409725 (81.5%)
                                                                                    II
## ||
         Running time: 0.09 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGTACTAG_AAGGAGTA_cDNA190819_D2_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3900436
                                                                                    II
## ||
         Successfully assigned alignments: 3200353 (82.1%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 CGTACTAG ACTGCATA cDNA190819 E2 543P d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1323204
                                                                                    II
## ||
         Successfully assigned alignments : 1124547 (85.0%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGTACTAG_CGTCTAAT_cDNA190819_B2_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 4693622
                                                                                    \Pi
         Successfully assigned alignments: 3930176 (83.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6966_CGTACTAG_CTAAGCCT_cDNA190819_C2_543P_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 188
         Successfully assigned alignments : 171 (91.0%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_CGTACTAG_CTCTCTAT_cDNA190819_H2_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2560336
## ||
                                                                                    II
         Successfully assigned alignments : 2208422 (86.3%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGTACTAG_GTAAGGAG_cDNA190819_F2_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2299532
                                                                                    II
         Successfully assigned alignments: 1939021 (84.3%)
                                                                                    П
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CGTACTAG_TATCCTCT_cDNA190819_G2_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1185568
                                                                                    II
## ||
         Successfully assigned alignments: 1001478 (84.5%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6966_CGTACTAG_TCTCTCCG_cDNA190819_A2_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 4031806
## ||
         Successfully assigned alignments: 3474755 (86.2%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CTCTCTAC_AAGGAGTA_cDNA190819_D7_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2544994
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2064678 (81.1%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CTCTCTAC_ACTGCATA_cDNA190819_E7_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 4081902
                                                                                    II
## ||
         Successfully assigned alignments: 3474655 (85.1%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 CTCTCTAC CGTCTAAT cDNA190819 B7 562K d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 8322050
                                                                                    II
## ||
         Successfully assigned alignments : 7177104 (86.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.10 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CTCTCTAC_CTAAGCCT_cDNA190819_C7_562K_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1501214
                                                                                    \Pi
         Successfully assigned alignments: 1263918 (84.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6966_CTCTCTAC_CTCTCTAT_cDNA190819_H7_562K_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 6406936
## ||
         Successfully assigned alignments: 5337810 (83.3%)
                                                                                    II
## ||
         Running time: 0.08 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_CTCTCTAC_GTAAGGAG_cDNA190819_F7_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2261790
## ||
                                                                                    II
         Successfully assigned alignments: 1861695 (82.3%)
                                                                                    | |
## ||
         Running time : 0.04 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CTCTCTAC_TATCCTCT_cDNA190819_G7_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 5824752
                                                                                    II
         Successfully assigned alignments: 4722875 (81.1%)
                                                                                    П
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_CTCTCTAC_TCTCTCCG_cDNA190819_A7_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 897196
                                                                                    II
## ||
         Successfully assigned alignments: 704059 (78.5%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6966_GCTCATGA_AAGGAGTA_cDNA190819_D11_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 452
                                                                                    | |
## ||
         Successfully assigned alignments: 170 (37.6%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GCTCATGA_ACTGCATA_cDNA190819_E11_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 5965078
                                                                                    \Pi
## ||
         Successfully assigned alignments: 4970070 (83.3%)
                                                                                    II
## ||
         Running time: 0.08 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GCTCATGA_CGTCTAAT_cDNA190819_B11_562K_d42 L0 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 4870
                                                                                    II
## ||
         Successfully assigned alignments : 2982 (61.2%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 GCTCATGA CTAAGCCT cDNA190819 C11 562K d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1939154
## ||
                                                                                    II
         Successfully assigned alignments : 1441394 (74.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6966_GCTCATGA_CTCTCTAT_cDNA190819_H11_562K_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 4992896
                                                                                    II
         Successfully assigned alignments: 3675171 (73.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.07 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GCTCATGA_GTAAGGAG_cDNA190819_F11_562K_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 13074
         Successfully assigned alignments : 9451 (72.3%)
## ||
                                                                                    II
## ||
         Running time: 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_GCTCATGA_TATCCTCT_cDNA190819_G11_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 4776856
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3010654 (63.0%)
                                                                                    | |
## ||
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GCTCATGA_TCTCTCCG_cDNA190819_A11_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 1572
                                                                                    II
         Successfully assigned alignments: 236 (15.0%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GGACTCCT_AAGGAGTA_cDNA190819_D5_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 1128542
                                                                                    II
## ||
         Successfully assigned alignments: 862875 (76.5%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6966_GGACTCCT_ACTGCATA_cDNA190819_E5_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2785518
## ||
         Successfully assigned alignments: 2374967 (85.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GGACTCCT_CGTCTAAT_cDNA190819_B5_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 3867134
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3139103 (81.2%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane6966_GGACTCCT_CTAAGCCT_cDNA190819_C5_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1984166
                                                                                    II
## ||
         Successfully assigned alignments: 1522395 (76.7%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966 GGACTCCT CTCTCTAT cDNA190819 H5 543P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 4427666
                                                                                    II
## ||
         Successfully assigned alignments : 3818747 (86.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.07 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GGACTCCT_GTAAGGAG_cDNA190819_F5_543P_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2522548
                                                                                    II
         Successfully assigned alignments: 2082647 (82.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GGACTCCT_TATCCTCT_cDNA190819_G5_543P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 3937084
         Successfully assigned alignments : 3345931 (85.0\%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_GGACTCCT_TCTCTCCG_cDNA190819_A5_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 5773220
                                                                                    II
## ||
         Successfully assigned alignments: 4934963 (85.5%)
                                                                                    | |
## ||
         Running time : 0.08 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GTAGAGGA_AAGGAGTA_cDNA190819_D10_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2250084
                                                                                    II
         Successfully assigned alignments: 1614539 (71.8%)
## ||
                                                                                    П
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
## || Process BAM file lane6966_GTAGAGGA_ACTGCATA_cDNA190819_E10_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 237606
                                                                                    II
## ||
         Successfully assigned alignments: 167558 (70.5%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
                                                                                    | |
## || Process BAM file lane6966_GTAGAGGA_CGTCTAAT_cDNA190819_B10_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 946
                                                                                    | |
## ||
         Successfully assigned alignments: 170 (18.0%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6966_GTAGAGGA_CTAAGCCT_cDNA190819_C10_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 123880
                                                                                    \Pi
## ||
         Successfully assigned alignments: 94921 (76.6%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GTAGAGGA_CTCTCTAT_cDNA190819_H10_562K_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 482
                                                                                    \Pi
## ||
         Successfully assigned alignments : 200 (41.5%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 GTAGAGGA GTAAGGAG cDNA190819 F10 562K d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 1018
                                                                                    II
## ||
         Successfully assigned alignments : 502 (49.3%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.00 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GTAGAGGA_TATCCTCT_cDNA190819_G10_562K_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1357500
                                                                                    II
         Successfully assigned alignments: 840373 (61.9%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_GTAGAGGA_TCTCTCCCG_cDNA190819_A10_562K_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1946
         Successfully assigned alignments : 689 (35.4\%)
## ||
                                                                                    II
         Running time : 0.00 minutes
## ||
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_TAAGGCGA_AAGGAGTA_cDNA190819_D1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1070434
## ||
                                                                                    II
         Successfully assigned alignments: 902238 (84.3%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAAGGCGA_ACTGCATA_cDNA190819_E1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 717554
                                                                                    II
         Successfully assigned alignments: 605230 (84.3%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAAGGCGA_CGTCTAAT_cDNA190819_B1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 4478220
                                                                                    II
## ||
         Successfully assigned alignments: 3784477 (84.5%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
                                                                                    | |
## || Process BAM file lane6966_TAAGGCGA_CTAAGCCT_cDNA190819_C1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 112
## ||
         Successfully assigned alignments: 90 (80.4%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAAGGCGA_CTCTCTAT_cDNA190819_H1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1152184
                                                                                    \Pi
## ||
         Successfully assigned alignments: 983241 (85.3%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAAGGCGA_GTAAGGAG_cDNA190819_F1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1210696
                                                                                    II
## ||
         Successfully assigned alignments: 1007860 (83.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 TAAGGCGA TATCCTCT cDNA190819 G1 543P d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3265250
                                                                                    II
## ||
         Successfully assigned alignments : 2584518 (79.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAAGGCGA_TCTCTCCG_cDNA190819_A1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1693202
                                                                                    \Pi
         Successfully assigned alignments: 1388889 (82.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAGGCATG_AAGGAGTA_cDNA190819_D6_543P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2557378
         Successfully assigned alignments : 2144442 (83.9%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_TAGGCATG_ACTGCATA_cDNA190819_E6_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1714008
                                                                                    II
## ||
         Successfully assigned alignments : 1243927 (72.6%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAGGCATG_CGTCTAAT_cDNA190819_B6_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 427622
                                                                                    II
         Successfully assigned alignments: 314217 (73.5%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAGGCATG_CTAAGCCT_cDNA190819_C6_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 3224824
                                                                                    II
## ||
         Successfully assigned alignments: 2721910 (84.4%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6966_TAGGCATG_CTCTCTAT_cDNA190819_H6_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 5548614
## ||
         Successfully assigned alignments: 4458014 (80.3%)
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAGGCATG_GTAAGGAG_cDNA190819_F6_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2440218
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2096711 (85.9%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TAGGCATG_TATCCTCT_cDNA190819_G6_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1774182
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1358100 (76.5%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6966 TAGGCATG TCTCTCCG cDNA190819 A6 543P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3347280
                                                                                    II
## ||
         Successfully assigned alignments : 2472963 (73.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TCCTGAGC_AAGGAGTA_cDNA190819_D4_543P_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 622966
                                                                                    II
         Successfully assigned alignments: 529661 (85.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TCCTGAGC_ACTGCATA_cDNA190819_E4_543P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 1612262
         Successfully assigned alignments : 1365763 (84.7%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6966_TCCTGAGC_CGTCTAAT_cDNA190819_B4_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 5817098
                                                                                    \Pi
## ||
         Successfully assigned alignments: 4944463 (85.0%)
## ||
                                                                                    | |
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TCCTGAGC_CTAAGCCT_cDNA190819_C4_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 2525532
         Successfully assigned alignments: 2019101 (79.9%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6966_TCCTGAGC_CTCTCTAT_cDNA190819_H4_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 2786818
                                                                                    II
## ||
         Successfully assigned alignments: 2333517 (83.7%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
                                                                                    \Pi
## || Process BAM file lane6966_TCCTGAGC_GTAAGGAG_cDNA190819_F4_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1398512
                                                                                    | |
## ||
         Successfully assigned alignments: 1174764 (84.0%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6966_TCCTGAGC_TATCCTCT_cDNA190819_G4_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1218644
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1027568 (84.3%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane6966_TCCTGAGC_TCTCTCCG_cDNA190819_A4_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 4412448
                                                                                    \Pi
         Successfully assigned alignments : 3870477 (87.7%)
## ||
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967 AAGAGGCA AAGGAGTA cDNA190820 D9 559G d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 1491944
                                                                                    II
## ||
         Successfully assigned alignments : 1046002 (70.1%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AAGAGGCA_ACTGCATA_cDNA190820_E9_559G_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2544146
                                                                                    II
         Successfully assigned alignments: 1794798 (70.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AAGAGGCA_CGTCTAAT_cDNA190820_B9_559G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 4038234
         Successfully assigned alignments : 2848769 (70.5%)
## ||
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_AAGAGGCA_CTAAGCCT_cDNA190820_C9_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2221962
                                                                                    II
## ||
         Successfully assigned alignments : 1194719 (53.8%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AAGAGGCA_CTCTCTAT_cDNA190820_H9_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 2324274
         Successfully assigned alignments: 1647500 (70.9%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AAGAGGCA_GTAAGGAG_cDNA190820_F9_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 1657530
                                                                                    II
## ||
         Successfully assigned alignments: 1095381 (66.1%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6967_AAGAGGCA_TATCCTCT_cDNA190820_G9_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1733488
## ||
         Successfully assigned alignments: 1225002 (70.7%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6967_AAGAGGCA_TCTCTCCG_cDNA190820_A9_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2905854
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2133320 (73.4%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AGGCAGAA_AAGGAGTA_cDNA190820_D3_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1992262
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1490643 (74.8%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 AGGCAGAA ACTGCATA cDNA190820 E3 520P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1475016
                                                                                    II
## ||
         Successfully assigned alignments : 1035737 (70.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AGGCAGAA_CGTCTAAT_cDNA190820_B3_520P_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2308234
                                                                                    II
         Successfully assigned alignments: 1633332 (70.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AGGCAGAA_CTAAGCCT_cDNA190820_C3_520P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 2435754
         Successfully assigned alignments : 1896421 (77.9%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_AGGCAGAA_CTCTCTAT_cDNA190820_H3_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 1949944
                                                                                    \Pi
## ||
         Successfully assigned alignments : 1399441 (71.8%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AGGCAGAA_GTAAGGAG_cDNA190820_F3_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 1659722
         Successfully assigned alignments: 1244518 (75.0%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_AGGCAGAA_TATCCTCT_cDNA190820_G3_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 1647598
                                                                                    II
## ||
         Successfully assigned alignments: 1168725 (70.9%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    \Pi
## || Process BAM file lane6967_AGGCAGAA_TCTCTCCCG_cDNA190820_A3_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2702594
## ||
         Successfully assigned alignments: 2134942 (79.0%)
                                                                                    II
         Running time : 0.06 minutes
## ||
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6967_ATCTCAGG_AAGGAGTA_cDNA190820_D12_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 3423228
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2316174 (67.7%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_ATCTCAGG_ACTGCATA_cDNA190820_E12_559G_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 4089736
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2837060 (69.4%)
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 ATCTCAGG CGTCTAAT cDNA190820 B12 559G d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 4549206
                                                                                    II
## ||
         Successfully assigned alignments : 3132887 (68.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.06 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_ATCTCAGG_CTAAGCCT_cDNA190820_C12_559G_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 4148292
                                                                                    II
         Successfully assigned alignments: 2937193 (70.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_ATCTCAGG_CTCTCTAT_cDNA190820_H12_559G_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 2514282
         Successfully assigned alignments : 1876494 (74.6%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_ATCTCAGG_GTAAGGAG_cDNA190820_F12_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2532220
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 1780346 (70.3%)
                                                                                    | |
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_ATCTCAGG_TATCCTCT_cDNA190820_G12_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2564234
                                                                                    II
         Successfully assigned alignments: 1592787 (62.1%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_ATCTCAGG_TCTCTCCG_cDNA190820_A12_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 4546102
                                                                                    II
## ||
         Successfully assigned alignments: 3357958 (73.9%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6967_CGAGGCTG_AAGGAGTA_cDNA190820_D8_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2127336
## ||
         Successfully assigned alignments: 1453987 (68.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6967_CGAGGCTG_ACTGCATA_cDNA190820_E8_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1479448
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1046340 (70.7%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane6967_CGAGGCTG_CGTCTAAT_cDNA190820_B8_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2157538
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1455878 (67.5%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 CGAGGCTG CTAAGCCT cDNA190820 C8 559G d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1791672
                                                                                    II
## ||
         Successfully assigned alignments : 1268661 (70.8%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CGAGGCTG_CTCTCTAT_cDNA190820_H8_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1435100
                                                                                    \Pi
         Successfully assigned alignments: 1008710 (70.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CGAGGCTG_GTAAGGAG_cDNA190820_F8_559G_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 1919030
## ||
         Successfully assigned alignments: 1366578 (71.2%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_CGAGGCTG_TATCCTCT_cDNA190820_G8_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1405014
                                                                                    II
## ||
         Successfully assigned alignments: 1029470 (73.3%)
                                                                                    | |
## ||
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CGAGGCTG_TCTCTCCG_cDNA190820_A8_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2250342
                                                                                    II
         Successfully assigned alignments: 1617984 (71.9%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CGTACTAG_AAGGAGTA_cDNA190820_D2_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1566460
                                                                                    II
## ||
         Successfully assigned alignments: 1179579 (75.3%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6967_CGTACTAG_ACTGCATA_cDNA190820_E2_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1182464
## ||
         Successfully assigned alignments: 757761 (64.1%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6967_CGTACTAG_CGTCTAAT_cDNA190820_B2_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2477796
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1668546 (67.3%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CGTACTAG_CTAAGCCT_cDNA190820_C2_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1901034
                                                                                    II
## ||
         Successfully assigned alignments: 1408242 (74.1%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 CGTACTAG CTCTCTAT cDNA190820 H2 520P d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1238846
                                                                                    II
## ||
         Successfully assigned alignments : 1075464 (86.8%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CGTACTAG_GTAAGGAG_cDNA190820_F2_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 743138
                                                                                    \Pi
         Successfully assigned alignments: 496497 (66.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CGTACTAG_TATCCTCT_cDNA190820_G2_520P_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 984010
         Successfully assigned alignments : 673500 (68.4\%)
## ||
                                                                                    II
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_CGTACTAG_TCTCTCCG_cDNA190820_A2_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2479190
## ||
                                                                                    II
         Successfully assigned alignments: 1987818 (80.2%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CTCTCTAC_AAGGAGTA_cDNA190820_D7_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1993312
                                                                                    II
         Successfully assigned alignments: 1445356 (72.5%)
                                                                                    П
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CTCTCTAC_ACTGCATA_cDNA190820_E7_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 2174606
                                                                                    II
## ||
         Successfully assigned alignments: 1615387 (74.3%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane6967_CTCTCTAC_CGTCTAAT_cDNA190820_B7_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 3013870
## ||
         Successfully assigned alignments: 2297163 (76.2%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CTCTCTAC_CTAAGCCT_cDNA190820_C7_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2135430
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1491395 (69.8%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CTCTCTAC_CTCTCTAT_cDNA190820_H7_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 2145892
                                                                                    II
## ||
         Successfully assigned alignments: 1556968 (72.6%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 CTCTCTAC GTAAGGAG cDNA190820 F7 559G d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1960624
                                                                                    II
## ||
         Successfully assigned alignments : 1474218 (75.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_CTCTCTAC_TATCCTCT_cDNA190820_G7_559G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 2800366
                                                                                    \Pi
         Successfully assigned alignments: 2163082 (77.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6967_CTCTCTAC_TCTCTCCG_cDNA190820_A7_559G_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2149884
         Successfully assigned alignments : 1550968 (72.1%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_GCTCATGA_AAGGAGTA_cDNA190820_D11_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 2717004
                                                                                    \Pi
         Successfully assigned alignments : 1674169 (61.6%)
## ||
                                                                                    | | |
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GCTCATGA_ACTGCATA_cDNA190820_E11_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 2323424
         Successfully assigned alignments: 1691443 (72.8%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GCTCATGA_CGTCTAAT_cDNA190820_B11_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 4325276
                                                                                    II
## ||
         Successfully assigned alignments: 2987124 (69.1%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
                                                                                    \Pi
## || Process BAM file lane6967_GCTCATGA_CTAAGCCT_cDNA190820_C11_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
## ||
         Total alignments: 4225724
                                                                                    | |
## ||
         Successfully assigned alignments: 3206888 (75.9%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6967_GCTCATGA_CTCTCTAT_cDNA190820_H11_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
         Total alignments : 2421114
## ||
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1636806 (67.6%)
                                                                                    II
         Running time : 0.04 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GCTCATGA_GTAAGGAG_cDNA190820_F11_559G_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2490636
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1622722 (65.2%)
                                                                                    \Pi
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967 GCTCATGA TATCCTCT cDNA190820 G11 559G d42 L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 1797428
                                                                                    II
## ||
         Successfully assigned alignments : 1187163 (66.0%)
                                                                                    \prod
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GCTCATGA_TCTCTCCG_cDNA190820_A11_559G_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 3854740
                                                                                    II
         Successfully assigned alignments: 2675700 (69.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GGACTCCT_AAGGAGTA_cDNA190820_D5_520P_d42_L00 ... ||
## || WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 1428480
         Successfully assigned alignments : 1012628 (70.9%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_GGACTCCT_ACTGCATA_cDNA190820_E5_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 1418926
                                                                                    II
## ||
         Successfully assigned alignments: 1010121 (71.2%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GGACTCCT_CGTCTAAT_cDNA190820_B5_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3526880
                                                                                    II
         Successfully assigned alignments: 2763358 (78.4%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
## || Process BAM file lane6967_GGACTCCT_CTAAGCCT_cDNA190820_C5_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 1551338
                                                                                    II
## ||
         Successfully assigned alignments: 1116709 (72.0%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6967_GGACTCCT_CTCTCTAT_cDNA190820_H5_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2361252
## ||
         Successfully assigned alignments: 1798269 (76.2%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6967_GGACTCCT_GTAAGGAG_cDNA190820_F5_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2064840
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1549768 (75.1%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GGACTCCT_TATCCTCT_cDNA190820_G5_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2409810
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1773429 (73.6%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 GGACTCCT TCTCTCCG cDNA190820 A5 520P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 2352836
                                                                                    II
## ||
         Successfully assigned alignments : 2053109 (87.3%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GTAGAGGA_AAGGAGTA_cDNA190820_D10_559G_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 2739820
                                                                                    II
         Successfully assigned alignments: 1765656 (64.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GTAGAGGA_ACTGCATA_cDNA190820_E10_559G_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 1946170
         Successfully assigned alignments : 1326889 (68.2%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_GTAGAGGA_CGTCTAAT_cDNA190820_B10_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 3616956
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2499217 (69.1%)
                                                                                    | |
## ||
         Running time : 0.05 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GTAGAGGA_CTAAGCCT_cDNA190820_C10_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3318756
                                                                                    II
         Successfully assigned alignments: 2462900 (74.2%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GTAGAGGA_CTCTCTAT_cDNA190820_H10_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 2327772
                                                                                    II
## ||
         Successfully assigned alignments: 1627460 (69.9%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
                                                                                    | |
## || Process BAM file lane6967_GTAGAGGA_GTAAGGAG_cDNA190820_F10_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2390718
                                                                                    | |
## ||
         Successfully assigned alignments: 1764206 (73.8%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GTAGAGGA_TATCCTCT_cDNA190820_G10_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1915770
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1084977 (56.6%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_GTAGAGGA_TCTCTCCG_cDNA190820_A10_559G_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2963520
                                                                                    II
## ||
         Successfully assigned alignments: 2042654 (68.9%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 TAAGGCGA AAGGAGTA cDNA190820 D1 520P d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1629364
                                                                                    II
## ||
         Successfully assigned alignments: 1167061 (71.6%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAAGGCGA_ACTGCATA_cDNA190820_E1_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 724416
                                                                                    \Pi
         Successfully assigned alignments: 518884 (71.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAAGGCGA_CGTCTAAT_cDNA190820_B1_520P_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2460848
         Successfully assigned alignments : 1826867 (74.2%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_TAAGGCGA_CTAAGCCT_cDNA190820_C1_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1857578
                                                                                    II
## ||
         Successfully assigned alignments: 1391633 (74.9%)
                                                                                    | |
## ||
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAAGGCGA_CTCTCTAT_cDNA190820_H1_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1159362
                                                                                    II
         Successfully assigned alignments: 753825 (65.0%)
## ||
                                                                                    П
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAAGGCGA_GTAAGGAG_cDNA190820_F1_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 559072
                                                                                    II
## ||
         Successfully assigned alignments: 403092 (72.1%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6967_TAAGGCGA_TATCCTCT_cDNA190820_G1_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 644638
         Successfully assigned alignments: 438459 (68.0%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6967_TAAGGCGA_TCTCTCCG_cDNA190820_A1_520P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2033406
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1577331 (77.6%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAGGCATG_AAGGAGTA_cDNA190820_D6_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1873312
                                                                                    II
## ||
         Successfully assigned alignments: 1364981 (72.9%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6967 TAGGCATG ACTGCATA cDNA190820 E6 520P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1576964
                                                                                    II
## ||
         Successfully assigned alignments : 1140040 (72.3%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAGGCATG_CGTCTAAT_cDNA190820_B6_520P_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 3764088
                                                                                    II
         Successfully assigned alignments: 2661646 (70.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAGGCATG_CTAAGCCT_cDNA190820_C6_520P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2317714
         Successfully assigned alignments : 1641632 (70.8%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_TAGGCATG_CTCTCTAT_cDNA190820_H6_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 3389066
                                                                                    II
## ||
         Successfully assigned alignments : 2701480 (79.7%)
## ||
                                                                                    | |
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAGGCATG_GTAAGGAG_cDNA190820_F6_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 2270382
         Successfully assigned alignments: 1729869 (76.2%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TAGGCATG_TATCCTCT_cDNA190820_G6_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 1370032
                                                                                    II
## ||
         Successfully assigned alignments: 885103 (64.6%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6967_TAGGCATG_TCTCTCCCG_cDNA190820_A6_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2770626
## ||
         Successfully assigned alignments: 2173087 (78.4%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \prod
                                                                                    \prod
## || Process BAM file lane6967_TCCTGAGC_AAGGAGTA_cDNA190820_D4_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 816888
                                                                                    \Pi
## ||
         Successfully assigned alignments: 613839 (75.1%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane6967_TCCTGAGC_ACTGCATA_cDNA190820_E4_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2072986
                                                                                    II
         Successfully assigned alignments : 1583995 (76.4%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967 TCCTGAGC CGTCTAAT cDNA190820 B4 520P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 2165566
                                                                                    II
## ||
         Successfully assigned alignments : 1575451 (72.8%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TCCTGAGC_CTAAGCCT_cDNA190820_C4_520P_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1777232
                                                                                    II
         Successfully assigned alignments: 1311229 (73.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TCCTGAGC_CTCTCTAT_cDNA190820_H4_520P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 2165374
         Successfully assigned alignments : 1664698 (76.9%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6967_TCCTGAGC_GTAAGGAG_cDNA190820_F4_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 832828
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 606712 (72.8%)
                                                                                    | |
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TCCTGAGC_TATCCTCT_cDNA190820_G4_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 1776004
         Successfully assigned alignments: 1265972 (71.3%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6967_TCCTGAGC_TCTCTCCG_cDNA190820_A4_520P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 3381734
                                                                                    II
## ||
         Successfully assigned alignments: 2598928 (76.9%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
                                                                                    \Pi
## || Process BAM file lane6976_AAGAGGCA_AAGGAGTA_cDNA190821_D9_622A_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1128070
## ||
         Successfully assigned alignments: 870729 (77.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6976_AAGAGGCA_ACTGCATA_cDNA190821_E9_622A_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1607772
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1056338 (65.7%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane6976_AAGAGGCA_CGTCTAAT_cDNA190821_B9_622A_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1189534
                                                                                    \Pi
## ||
         Successfully assigned alignments: 846731 (71.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976 AAGAGGCA CTAAGCCT cDNA190821 C9 622A d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 1434980
                                                                                    II
## ||
         Successfully assigned alignments : 930842 (64.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6976_AAGAGGCA_CTCTCTAT_cDNA190821_H9_622A_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2195444
                                                                                    II
         Successfully assigned alignments: 1615817 (73.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6976_AAGAGGCA_GTAAGGAG_cDNA190821_F9_622A_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 2859776
         Successfully assigned alignments : 2227066 (77.9%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_AAGAGGCA_TATCCTCT_cDNA190821_G9_622A_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 3219224
                                                                                    II
## ||
         Successfully assigned alignments : 2580322 (80.2%)
                                                                                    | |
## ||
         Running time : 0.05 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_AAGAGGCA_TCTCTCCG_cDNA190821_A9_622A_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2032442
                                                                                    II
         Successfully assigned alignments: 1445024 (71.1%)
                                                                                    \Pi
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_AGGCAGAA_AAGGAGTA_cDNA190821_D3_544Q_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1693160
                                                                                    II
## ||
         Successfully assigned alignments: 1151913 (68.0%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
                                                                                    | |
## || Process BAM file lane6976_AGGCAGAA_ACTGCATA_cDNA190821_E3_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1489010
## ||
         Successfully assigned alignments: 1127067 (75.7%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6976_AGGCAGAA_CGTCTAAT_cDNA190821_B3_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 3352052
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2320459 (69.2%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane6976_AGGCAGAA_CTAAGCCT_cDNA190821_C3_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1523256
                                                                                    II
## ||
         Successfully assigned alignments: 1118179 (73.4%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976 AGGCAGAA CTCTCTAT cDNA190821 H3 544Q d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2089422
                                                                                    II
## ||
         Successfully assigned alignments : 1526589 (73.1%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    | |
## || Process BAM file lane6976_AGGCAGAA_GTAAGGAG_cDNA190821_F3_544Q_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1049520
                                                                                    II
         Successfully assigned alignments: 753233 (71.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6976_AGGCAGAA_TATCCTCT_cDNA190821_G3_544Q_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2006658
## ||
         Successfully assigned alignments: 396793 (19.8%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_AGGCAGAA_TCTCTCCCG_cDNA190821_A3_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 2054996
                                                                                    \Pi
## ||
## ||
         Successfully assigned alignments: 1529763 (74.4%)
                                                                                    | | |
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_ATCTCAGG_AAGGAGTA_cDNA190821_D12_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 6267518
                                                                                    II
## ||
         Successfully assigned alignments: 4683790 (74.7%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.08 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_ATCTCAGG_ACTGCATA_cDNA190821_E12_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 4013814
                                                                                    II
## ||
         Successfully assigned alignments: 3006982 (74.9%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
                                                                                    \Pi
## || Process BAM file lane6976_ATCTCAGG_CGTCTAAT_cDNA190821_B12_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
## ||
         Total alignments: 4348996
                                                                                    | |
## ||
         Successfully assigned alignments: 2873726 (66.1%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6976_ATCTCAGG_CTAAGCCT_cDNA190821_C12_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 5173396
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3934053 (76.0%)
                                                                                    II
         Running time: 0.07 minutes
                                                                                    \prod
## ||
## ||
                                                                                    11
## || Process BAM file lane6976_ATCTCAGG_CTCTCTAT_cDNA190821_H12_622A_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2500482
                                                                                    \Pi
         Successfully assigned alignments : 1931347 (77.2%)
## ||
                                                                                    \Pi
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976 ATCTCAGG GTAAGGAG cDNA190821 F12 622A d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 4543186
                                                                                    II
## ||
         Successfully assigned alignments : 3631043 (79.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.07 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6976_ATCTCAGG_TATCCTCT_cDNA190821_G12_622A_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 5445466
                                                                                    II
         Successfully assigned alignments: 3833940 (70.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.07 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6976_ATCTCAGG_TCTCTCCG_cDNA190821_A12_622A_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 2655606
         Successfully assigned alignments : 2110280 (79.5%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_CGAGGCTG_AAGGAGTA_cDNA190821_D8_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1920744
                                                                                    II
## ||
         Successfully assigned alignments: 1326291 (69.1%)
                                                                                    | |
## ||
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CGAGGCTG_ACTGCATA_cDNA190821_E8_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1873914
                                                                                    II
         Successfully assigned alignments: 1297219 (69.2%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CGAGGCTG_CGTCTAAT_cDNA190821_B8_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1225988
                                                                                    II
## ||
         Successfully assigned alignments: 879185 (71.7%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6976_CGAGGCTG_CTAAGCCT_cDNA190821_C8_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2067304
## ||
         Successfully assigned alignments: 1660971 (80.3%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane6976_CGAGGCTG_CTCTCTAT_cDNA190821_H8_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1156818
                                                                                    \Pi
## ||
         Successfully assigned alignments: 905165 (78.2%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CGAGGCTG_GTAAGGAG_cDNA190821_F8_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 768980
                                                                                    \Pi
## ||
         Successfully assigned alignments: 558217 (72.6%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976 CGAGGCTG TATCCTCT cDNA190821 G8 622A d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1932508
                                                                                    II
## ||
         Successfully assigned alignments: 1540263 (79.7%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CGAGGCTG_TCTCTCCCG_cDNA190821_A8_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1225066
                                                                                    \Pi
         Successfully assigned alignments : 913564 (74.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6976_CGTACTAG_AAGGAGTA_cDNA190821_D2_544Q_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1885548
         Successfully assigned alignments : 1296752 (68.8%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_CGTACTAG_ACTGCATA_cDNA190821_E2_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 862772
## ||
                                                                                    II
         Successfully assigned alignments: 719690 (83.4%)
                                                                                    | |
## ||
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CGTACTAG_CGTCTAAT_cDNA190821_B2_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3291016
                                                                                    II
         Successfully assigned alignments: 2160788 (65.7%)
## ||
                                                                                    П
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CGTACTAG_CTAAGCCT_cDNA190821_C2_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 2532192
                                                                                    II
## ||
         Successfully assigned alignments: 1857096 (73.3%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
                                                                                    | |
## || Process BAM file lane6976_CGTACTAG_CTCTCTAT_cDNA190821_H2_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2650426
## ||
         Successfully assigned alignments: 1828603 (69.0%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6976_CGTACTAG_GTAAGGAG_cDNA190821_F2_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1922
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1430 (74.4%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CGTACTAG_TATCCTCT_cDNA190821_G2_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1498528
                                                                                    II
## ||
         Successfully assigned alignments: 1007699 (67.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976 CGTACTAG TCTCTCCG cDNA190821 A2 544Q d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2239452
                                                                                    II
## ||
         Successfully assigned alignments : 1609492 (71.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CTCTCTAC_AAGGAGTA_cDNA190821_D7_622A_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1315498
                                                                                    \Pi
         Successfully assigned alignments : 928356 (70.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6976_CTCTCTAC_ACTGCATA_cDNA190821_E7_622A_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1474302
         Successfully assigned alignments : 1005747 (68.2%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_CTCTCTAC_CGTCTAAT_cDNA190821_B7_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2541120
                                                                                    II
## ||
         Successfully assigned alignments: 1750207 (68.9%)
## ||
                                                                                    | |
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CTCTCTAC_CTAAGCCT_cDNA190821_C7_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 2549282
         Successfully assigned alignments: 2050772 (80.4%)
## ||
                                                                                    П
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_CTCTCTAC_CTCTCTAT_cDNA190821_H7_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 2485744
                                                                                    II
## ||
         Successfully assigned alignments: 1880795 (75.7%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6976_CTCTCTAC_GTAAGGAG_cDNA190821_F7_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2061306
                                                                                    | |
## ||
         Successfully assigned alignments: 1601013 (77.7%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \prod
## || Process BAM file lane6976_CTCTCTAC_TATCCTCT_cDNA190821_G7_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2606450
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1863798 (71.5%)
                                                                                    II
                                                                                    \prod
## ||
         Running time: 0.04 minutes
## ||
                                                                                    11
## || Process BAM file lane6976_CTCTCTAC_TCTCTCCG_cDNA190821_A7_622A_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2491580
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1864364 (74.8%)
                                                                                    \Pi
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976 GCTCATGA AAGGAGTA cDNA190821 D11 622A d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 92
                                                                                    II
## ||
         Successfully assigned alignments: 9 (9.8%)
                                                                                    \prod
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GCTCATGA_ACTGCATA_cDNA190821_E11_622A_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 82
                                                                                    II
         Successfully assigned alignments: 9 (11.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6976_GCTCATGA_CGTCTAAT_cDNA190821_B11_622A_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 5438720
         Successfully assigned alignments : 3899964 (71.7\%)
## ||
                                                                                    II
## ||
         Running time: 0.07 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_GCTCATGA_CTAAGCCT_cDNA190821_C11_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 5394992
                                                                                    \Pi
## ||
         Successfully assigned alignments: 4062273 (75.3%)
                                                                                    | |
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GCTCATGA_CTCTCTAT_cDNA190821_H11_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3024128
                                                                                    II
         Successfully assigned alignments: 1799779 (59.5%)
## ||
                                                                                    П
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GCTCATGA_GTAAGGAG_cDNA190821_F11_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 38
                                                                                    II
## ||
         Successfully assigned alignments: 10 (26.3%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
                                                                                    \Pi
## || Process BAM file lane6976_GCTCATGA_TATCCTCT_cDNA190821_G11_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 4317102
## ||
         Successfully assigned alignments: 3244322 (75.2%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GCTCATGA_TCTCTCCG_cDNA190821_A11_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 4249850
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3186648 (75.0%)
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GGACTCCT_AAGGAGTA_cDNA190821_D5_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2312646
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1767750 (76.4%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976 GGACTCCT ACTGCATA cDNA190821 E5 544Q d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1333642
                                                                                    II
## ||
         Successfully assigned alignments : 906086 (67.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GGACTCCT_CGTCTAAT_cDNA190821_B5_544Q_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1703554
                                                                                    II
         Successfully assigned alignments: 1083358 (63.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GGACTCCT_CTAAGCCT_cDNA190821_C5_544Q_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 1775946
         Successfully assigned alignments : 1392597 (78.4%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_GGACTCCT_CTCTCTAT_cDNA190821_H5_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 2501712
                                                                                   \Pi
## ||
         Successfully assigned alignments: 1916922 (76.6%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GGACTCCT_GTAAGGAG_cDNA190821_F5_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1016100
                                                                                    II
         Successfully assigned alignments: 753270 (74.1%)
## ||
                                                                                    П
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane6976_GGACTCCT_TATCCTCT_cDNA190821_G5_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 2240082
                                                                                    II
## ||
         Successfully assigned alignments: 1868318 (83.4%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
                                                                                   \Pi
## || Process BAM file lane6976_GGACTCCT_TCTCTCCG_cDNA190821_A5_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2225954
## ||
         Successfully assigned alignments: 1673739 (75.2%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane6976_GTAGAGGA_AAGGAGTA_cDNA190821_D10_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2347636
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1752998 (74.7%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GTAGAGGA_ACTGCATA_cDNA190821_E10_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1626472
                                                                                   \Pi
## ||
         Successfully assigned alignments: 1268104 (78.0%)
                                                                                   \Pi
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976_GTAGAGGA_CGTCTAAT_cDNA190821_B10_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 4267666
                                                                                    II
## ||
         Successfully assigned alignments : 3237954 (75.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.06 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GTAGAGGA_CTAAGCCT_cDNA190821_C10_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2349858
                                                                                    II
         Successfully assigned alignments: 1826782 (77.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane6976_GTAGAGGA_CTCTCTAT_cDNA190821_H10_622A_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
```

```
\prod
         Total alignments: 3715058
         Successfully assigned alignments : 2701609 (72.7%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_GTAGAGGA_GTAAGGAG_cDNA190821_F10_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 344806
## ||
                                                                                    II
         Successfully assigned alignments : 264442 (76.7%)
                                                                                    | |
## ||
         Running time : 0.02 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GTAGAGGA_TATCCTCT_cDNA190821_G10_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4179940
                                                                                    II
         Successfully assigned alignments: 3160345 (75.6%)
                                                                                    П
## ||
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_GTAGAGGA_TCTCTCCG_cDNA190821_A10_622A_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 2961346
                                                                                    II
## ||
         Successfully assigned alignments : 2272474 (76.7%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
                                                                                    | |
## || Process BAM file lane6976_TAAGGCGA_AAGGAGTA_cDNA190821_D1_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2687990
## ||
         Successfully assigned alignments: 1843691 (68.6%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TAAGGCGA_ACTGCATA_cDNA190821_E1_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2068502
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1649659 (79.8%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TAAGGCGA_CGTCTAAT_cDNA190821_B1_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2392080
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1662298 (69.5%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976 TAAGGCGA CTAAGCCT cDNA190821 C1 544Q d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2361792
                                                                                    II
## ||
         Successfully assigned alignments : 1780314 (75.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TAAGGCGA_CTCTCTAT_cDNA190821_H1_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2249664
                                                                                    \Pi
         Successfully assigned alignments: 1858090 (82.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6976_TAAGGCGA_GTAAGGAG_cDNA190821_F1_544Q_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 20404
         Successfully assigned alignments : 16301 (79.9%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_TAAGGCGA_TATCCTCT_cDNA190821_G1_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 3001130
                                                                                    II
## ||
         Successfully assigned alignments: 2240975 (74.7%)
                                                                                    | |
## ||
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TAAGGCGA_TCTCTCCG_cDNA190821_A1_544Q_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1822020
                                                                                    II
         Successfully assigned alignments: 1309182 (71.9%)
## ||
                                                                                    П
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TAGGCATG_AAGGAGTA_cDNA190821_D6_544Q_d42_L00 \dots
         WARNING: Paired-end reads were found.
         Total alignments: 600446
                                                                                    II
## ||
         Successfully assigned alignments: 480788 (80.1%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    | |
## || Process BAM file lane6976_TAGGCATG_ACTGCATA_cDNA190821_E6_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1815490
## ||
         Successfully assigned alignments: 1363722 (75.1%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TAGGCATG_CGTCTAAT_cDNA190821_B6_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 3170258
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2327563 (73.4%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TAGGCATG_CTAAGCCT_cDNA190821_C6_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 2657268
                                                                                    II
## ||
         Successfully assigned alignments: 1923344 (72.4%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976 TAGGCATG CTCTCTAT cDNA190821 H6 544Q d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2743404
                                                                                    II
## ||
         Successfully assigned alignments : 2051099 (74.8%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    | |
## || Process BAM file lane6976_TAGGCATG_GTAAGGAG_cDNA190821_F6_544Q_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1267604
                                                                                    II
         Successfully assigned alignments: 864580 (68.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6976_TAGGCATG_TATCCTCT_cDNA190821_G6_544Q_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2318502
         Successfully assigned alignments : 1728641 (74.6%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane6976_TAGGCATG_TCTCTCCG_cDNA190821_A6_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 3323050
                                                                                    II
## ||
         Successfully assigned alignments: 2427967 (73.1%)
                                                                                    | |
## ||
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TCCTGAGC_AAGGAGTA_cDNA190821_D4_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 725098
                                                                                    II
         Successfully assigned alignments: 526732 (72.6%)
## ||
                                                                                    П
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TCCTGAGC_ACTGCATA_cDNA190821_E4_544Q_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1301720
                                                                                    II
## ||
         Successfully assigned alignments: 908205 (69.8%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane6976_TCCTGAGC_CGTCTAAT_cDNA190821_B4_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2549266
## ||
         Successfully assigned alignments: 1742087 (68.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TCCTGAGC_CTAAGCCT_cDNA190821_C4_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1711064
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1377495 (80.5%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane6976_TCCTGAGC_CTCTCTAT_cDNA190821_H4_544Q_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2119150
                                                                                    II
## ||
         Successfully assigned alignments: 1464200 (69.1%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane6976 TCCTGAGC GTAAGGAG cDNA190821 F4 544Q d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 950546
                                                                                    II
## ||
         Successfully assigned alignments : 708233 (74.5%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.02 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane6976_TCCTGAGC_TATCCTCT_cDNA190821_G4_544Q_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2484738
                                                                                    II
         Successfully assigned alignments: 1944629 (78.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane6976_TCCTGAGC_TCTCTCCG_cDNA190821_A4_544Q_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2908100
         Successfully assigned alignments : 2154394 (74.1%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7055_AAGAGGCA_AAGGAGTA_lib190910_D9_526W_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 12718
                                                                                    II
## ||
         Successfully assigned alignments: 9753 (76.7%)
                                                                                    | |
## ||
         Running time : 0.00 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_AAGAGGCA_ACTGCATA_lib190910_E9_526W_d42_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3451166
                                                                                    II
         Successfully assigned alignments: 2953225 (85.6%)
                                                                                    П
## ||
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_AAGAGGCA_CGTCTAAT_lib190910_B9_526W_d42_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 619500
                                                                                    II
## ||
         Successfully assigned alignments: 426770 (68.9%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7055_AAGAGGCA_CTAAGCCT_lib190910_C9_526W_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2044802
## ||
         Successfully assigned alignments: 1419640 (69.4%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7055_AAGAGGCA_CTCTCTAT_lib190910_H9_526W_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2720958
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1993584 (73.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7055_AAGAGGCA_GTAAGGAG_lib190910_F9_526W_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3295962
                                                                                    II
## ||
         Successfully assigned alignments: 2751518 (83.5%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7055 AAGAGGCA TATCCTCT lib190910 G9 526W d42 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 813882
                                                                                    II
## ||
         Successfully assigned alignments : 587004 (72.1%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.02 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7055_AAGAGGCA_TCTCTCCG_lib190910_A9_526W_d42_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 4
                                                                                    \Pi
         Successfully assigned alignments : 3 (75.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7055_AGGCAGAA_AAGGAGTA_lib190910_D3_501T_d42_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 852094
         Successfully assigned alignments : 703359 (82.5\%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7055_AGGCAGAA_ACTGCATA_lib190910_E3_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 1472358
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 1263411 (85.8%)
                                                                                    | |
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_AGGCAGAA_CGTCTAAT_lib190910_B3_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 3277794
         Successfully assigned alignments: 2675202 (81.6%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_AGGCAGAA_CTAAGCCT_lib190910_C3_501T_d42_L001 ...
         WARNING: Paired-end reads were found.
         Total alignments: 3124118
                                                                                    II
## ||
         Successfully assigned alignments: 2590595 (82.9%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7055_AGGCAGAA_CTCTCTAT_lib190910_H3_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 57390
         Successfully assigned alignments: 44152 (76.9%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7055_AGGCAGAA_GTAAGGAG_lib190910_F3_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 679892
                                                                                    \Pi
## ||
         Successfully assigned alignments: 553038 (81.3%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7055_AGGCAGAA_TATCCTCT_lib190910_G3_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1465694
                                                                                    II
## ||
         Successfully assigned alignments: 1261212 (86.0%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7055 AGGCAGAA TCTCTCCG lib190910 A3 501T d42 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1195548
                                                                                    II
## ||
         Successfully assigned alignments : 1017814 (85.1%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    | |
## || Process BAM file lane7055_ATCTCAGG_AAGGAGTA_lib190910_D12_526W_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 7712714
                                                                                    II
         Successfully assigned alignments: 5664190 (73.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.09 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7055_ATCTCAGG_ACTGCATA_lib190910_E12_526W_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1000
         Successfully assigned alignments : 521 (52.1%)
## ||
                                                                                    II
## ||
         Running time: 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7055_ATCTCAGG_CGTCTAAT_lib190910_B12_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 11483464
                                                                                    \Pi
## ||
## ||
         Successfully assigned alignments: 7663710 (66.7%)
                                                                                    | | |
         Running time : 0.13 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_ATCTCAGG_CTAAGCCT_lib190910_C12_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 14681970
         Successfully assigned alignments: 12691283 (86.4%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.16 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_ATCTCAGG_CTCTCTAT_lib190910_H12_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 1596730
                                                                                    II
## ||
         Successfully assigned alignments: 1121654 (70.2%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7055_ATCTCAGG_GTAAGGAG_lib190910_F12_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1718
## ||
         Successfully assigned alignments: 1006 (58.6%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
                                                                                    \prod
## || Process BAM file lane7055_ATCTCAGG_TATCCTCT_lib190910_G12_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 460
                                                                                    \Pi
## ||
         Successfully assigned alignments : 24 (5.2%)
                                                                                    II
                                                                                    \prod
## ||
         Running time : 0.00 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7055_ATCTCAGG_TCTCTCCG_lib190910_A12_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 6633420
                                                                                    \Pi
## ||
         Successfully assigned alignments: 4452519 (67.1%)
                                                                                    \Pi
## ||
         Running time: 0.08 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055 CGAGGCTG AAGGAGTA lib190910 D8 526W d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 1516288
                                                                                    II
## ||
         Successfully assigned alignments : 1300962 (85.8%)
                                                                                    \prod
## ||
                                                                                    \Pi
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7055_CGAGGCTG_ACTGCATA_lib190910_E8_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 710666
                                                                                    \Pi
         Successfully assigned alignments: 610648 (85.9%)
                                                                                    \Pi
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7055_CGAGGCTG_CGTCTAAT_lib190910_B8_526W_d0_L001_ ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 3069820
         Successfully assigned alignments : 2654404 (86.5%)
## ||
                                                                                   II
## ||
         Running time: 0.05 minutes
                                                                                   \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGAGGCTG_CTAAGCCT_lib190910_C8_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 2217398
                                                                                   \Pi
## ||
         Successfully assigned alignments : 1865956 (84.2%)
                                                                                   | | |
## ||
         Running time : 0.04 minutes
## ||
                                                                                   II
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGAGGCTG_CTCTCTAT_lib190910_H8_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                   \prod
                                                                                   \mathbf{I}
## ||
         Total alignments: 2178066
         Successfully assigned alignments: 1825951 (83.8%)
## ||
                                                                                   \Pi
## ||
         Running time : 0.04 minutes
                                                                                   \mathbf{I}
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGAGGCTG_GTAAGGAG_lib190910_F8_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 2232002
                                                                                   \Pi
## ||
         Successfully assigned alignments: 1837170 (82.3%)
                                                                                   \Pi
## ||
## ||
         Running time : 0.04 minutes
                                                                                   \Pi
## || Process BAM file lane7055_CGAGGCTG_TATCCTCT_lib190910_G8_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
## ||
                                                                                   \Pi
         Total alignments: 1597036
## ||
         Successfully assigned alignments: 1305666 (81.8%)
                                                                                   \Pi
## ||
         Running time : 0.03 minutes
                                                                                   \Pi
                                                                                   \Pi
## || Process BAM file lane7055_CGAGGCTG_TCTCTCCG_lib190910_A8_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
## ||
         Total alignments: 8156724
                                                                                   \Pi
## ||
         Successfully assigned alignments: 6559617 (80.4%)
                                                                                   \Pi
                                                                                   \Pi
## ||
         Running time : 0.10 minutes
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGTACTAG_AAGGAGTA_lib190910_D2_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   \Pi
## ||
         Total alignments: 548076
                                                                                   \Pi
## ||
         Successfully assigned alignments: 456978 (83.4%)
                                                                                   \Pi
## ||
         Running time : 0.02 minutes
                                                                                   II
## ||
                                                                                   | | |
## || Process BAM file lane7055 CGTACTAG ACTGCATA lib190910 E2 501T d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
## ||
         Total alignments: 635428
                                                                                   II
## ||
         Successfully assigned alignments : 548234 (86.3%)
                                                                                   \Pi
## ||
                                                                                   \Pi
## ||
         Running time : 0.02 minutes
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGTACTAG_CGTCTAAT_lib190910_B2_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
## ||
         Total alignments : 2521324
                                                                                   \Pi
         Successfully assigned alignments: 2138317 (84.8%)
                                                                                   \Pi
## ||
## ||
         Running time : 0.03 minutes
                                                                                   \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGTACTAG_CTAAGCCT_lib190910_C2_501T_d0_L001_ ... ||
## || WARNING: Paired-end reads were found.
                                                                                   \Pi
```

```
\prod
         Total alignments: 2305642
         Successfully assigned alignments : 1987581 (86.2%)
## ||
                                                                                   II
## ||
         Running time: 0.04 minutes
                                                                                   \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGTACTAG_CTCTCTAT_lib190910_H2_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
         Total alignments: 9250
                                                                                   \Pi
         Successfully assigned alignments: 7626 (82.4%)
## ||
                                                                                   \Pi
## ||
         Running time : 0.00 minutes
                                                                                   II
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGTACTAG_GTAAGGAG_lib190910_F2_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                   \prod
## ||
                                                                                   \mathbf{I}
## ||
         Total alignments: 530248
         Successfully assigned alignments: 449034 (84.7%)
## ||
                                                                                   \Pi
## ||
         Running time : 0.02 minutes
                                                                                   \mathbf{I}
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CGTACTAG_TATCCTCT_lib190910_G2_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1366776
                                                                                   \Pi
## ||
         Successfully assigned alignments: 1159568 (84.8%)
                                                                                   \Pi
## ||
## ||
         Running time : 0.03 minutes
                                                                                   \Pi
## || Process BAM file lane7055_CGTACTAG_TCTCTCCG_lib190910_A2_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
## ||
## ||
         Total alignments: 298896
                                                                                   \Pi
## ||
         Successfully assigned alignments: 233111 (78.0%)
                                                                                   II
## ||
         Running time : 0.02 minutes
                                                                                   \Pi
                                                                                   \Pi
## ||
## || Process BAM file lane7055_CTCTCTAC_AAGGAGTA_lib190910_D7_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   \Pi
                                                                                   \Pi
## ||
         Total alignments: 3454946
## ||
         Successfully assigned alignments: 2996531 (86.7%)
                                                                                   \Pi
         Running time: 0.05 minutes
                                                                                   \Pi
## ||
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CTCTCTAC_ACTGCATA_lib190910_E7_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   \Pi
## ||
         Total alignments: 1938784
                                                                                   \Pi
         Successfully assigned alignments : 1644555 (84.8%)
## ||
                                                                                   \Pi
## ||
         Running time : 0.03 minutes
                                                                                   \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7055 CTCTCTAC CGTCTAAT lib190910 B7 526W d0 L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
         Total alignments: 6060864
                                                                                   \Pi
## ||
         Successfully assigned alignments : 5106568 (84.3%)
                                                                                   \Pi
## ||
         Running time : 0.08 minutes
                                                                                   \Pi
## ||
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CTCTCTAC_CTAAGCCT_lib190910_C7_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
## ||
## ||
         Total alignments : 344274
                                                                                   \Pi
         Successfully assigned alignments: 286347 (83.2%)
                                                                                   \Pi
## ||
## ||
         Running time : 0.02 minutes
                                                                                   \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7055_CTCTCTAC_CTCTCTAT_lib190910_H7_526W_d0_L001_ ... ||
## || WARNING: Paired-end reads were found.
                                                                                   \Pi
```

```
\prod
         Total alignments: 362634
         Successfully assigned alignments : 301675 (83.2\%)
## ||
                                                                                    II
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_CTCTCTAC_GTAAGGAG_lib190910_F7_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 3449142
                                                                                    \Pi
## ||
## ||
         Successfully assigned alignments: 2882141 (83.6%)
                                                                                    | | |
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_CTCTCTAC_TATCCTCT_lib190910_G7_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 2169814
         Successfully assigned alignments: 1719623 (79.3%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    \mathbf{I}
## ||
                                                                                    \Pi
## || Process BAM file lane7055_CTCTCTAC_TCTCTCCG_lib190910_A7_526W_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 251736
                                                                                    II
## ||
         Successfully assigned alignments: 218582 (86.8%)
## ||
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
                                                                                    \Pi
## || Process BAM file lane7055_GCTCATGA_AAGGAGTA_lib190910_D11_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 3128
## ||
         Successfully assigned alignments: 2390 (76.4%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GCTCATGA_ACTGCATA_lib190910_E11_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 212728
                                                                                    \Pi
## ||
         Successfully assigned alignments: 162188 (76.2%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GCTCATGA_CGTCTAAT_lib190910_B11_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 9587574
                                                                                    \Pi
## ||
         Successfully assigned alignments: 8196046 (85.5%)
                                                                                    \Pi
## ||
         Running time : 0.11 minutes
                                                                                    II
## ||
                                                                                    | | |
## || Process BAM file lane7055 GCTCATGA CTAAGCCT lib190910 C11 526W d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 14185564
                                                                                    II
## ||
         Successfully assigned alignments: 11256917 (79.4%)
                                                                                    \Pi
## ||
                                                                                    \prod
## ||
         Running time : 0.16 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GCTCATGA_CTCTCTAT_lib190910_H11_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 17996
                                                                                    II
         Successfully assigned alignments: 13929 (77.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GCTCATGA_GTAAGGAG_lib190910_F11_526W_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 226012
## ||
         Successfully assigned alignments: 167725 (74.2%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7055_GCTCATGA_TATCCTCT_lib190910_G11_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1219658
## ||
                                                                                    II
         Successfully assigned alignments: 885676 (72.6%)
                                                                                    | |
## ||
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GCTCATGA_TCTCTCCG_lib190910_A11_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3579598
                                                                                    II
         Successfully assigned alignments: 2312637 (64.6%)
## ||
                                                                                    П
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GGACTCCT_AAGGAGTA_lib190910_D5_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1008038
                                                                                    II
## ||
         Successfully assigned alignments: 836221 (83.0%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    | |
## || Process BAM file lane7055_GGACTCCT_ACTGCATA_lib190910_E5_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 515386
## ||
         Successfully assigned alignments: 405716 (78.7%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GGACTCCT_CGTCTAAT_lib190910_B5_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 311396
                                                                                    \Pi
## ||
         Successfully assigned alignments: 253795 (81.5%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GGACTCCT_CTAAGCCT_lib190910_C5_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1113892
                                                                                    II
## ||
         Successfully assigned alignments: 916224 (82.3%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7055 GGACTCCT CTCTCTAT lib190910 H5 501T d42 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 76558
                                                                                    II
## ||
         Successfully assigned alignments : 61357 (80.1%)
                                                                                    \prod
## ||
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7055_GGACTCCT_GTAAGGAG_lib190910_F5_501T_d42_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1146288
                                                                                    \Pi
         Successfully assigned alignments: 919217 (80.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7055_GGACTCCT_TATCCTCT_lib190910_G5_501T_d42_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 3225840
## ||
         Successfully assigned alignments: 2630450 (81.5%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7055_GGACTCCT_TCTCTCCG_lib190910_A5_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 675792
                                                                                    II
## ||
         Successfully assigned alignments : 563342 (83.4%)
                                                                                    | |
## ||
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GTAGAGGA_AAGGAGTA_lib190910_D10_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4544612
                                                                                    II
         Successfully assigned alignments: 3069664 (67.5%)
## ||
                                                                                    П
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_GTAGAGGA_ACTGCATA_lib190910_E10_526W_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 3647386
                                                                                    II
## ||
         Successfully assigned alignments: 2761631 (75.7%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7055_GTAGAGGA_CGTCTAAT_lib190910_B10_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 16452414
## ||
         Successfully assigned alignments: 12929809 (78.6%)
                                                                                    II
## ||
         Running time : 0.18 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7055_GTAGAGGA_CTAAGCCT_lib190910_C10_526W_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 196
                                                                                    \Pi
## ||
         Successfully assigned alignments: 16 (8.2%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7055_GTAGAGGA_CTCTCTAT_lib190910_H10_526W_d42_L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 3615264
                                                                                    II
## ||
         Successfully assigned alignments: 2710623 (75.0%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7055 GTAGAGGA GTAAGGAG lib190910 F10 526W d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3765552
                                                                                    II
## ||
         Successfully assigned alignments : 3214879 (85.4%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    | |
## || Process BAM file lane7055_GTAGAGGA_TATCCTCT_lib190910_G10_526W_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 140
                                                                                    II
         Successfully assigned alignments: 11 (7.9%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7055_GTAGAGGA_TCTCTCCG_lib190910_A10_526W_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 324536
         Successfully assigned alignments : 268486 (82.7%)
## ||
                                                                                   II
                                                                                   \Pi
## ||
         Running time: 0.02 minutes
## ||
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_AAGGAGTA_lib190910_D1_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
         Total alignments: 2039036
                                                                                   \Pi
         Successfully assigned alignments : 1735819 (85.1%)
## ||
                                                                                   \Pi
## ||
         Running time: 0.04 minutes
                                                                                   II
## ||
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_ACTGCATA_lib190910_E1_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                   \prod
## ||
                                                                                   \mathbf{I}
## ||
         Total alignments: 817472
         Successfully assigned alignments: 708881 (86.7%)
## ||
                                                                                   \Pi
## ||
         Running time : 0.02 minutes
                                                                                   \mathbf{I}
## ||
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_CGTCTAAT_lib190910_B1_501T_d0_L001_ ... ||
        WARNING: Paired-end reads were found.
         Total alignments : 629414
                                                                                   \Pi
## ||
         Successfully assigned alignments: 480948 (76.4%)
                                                                                   \Pi
## ||
## ||
         Running time : 0.02 minutes
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_CTAAGCCT_lib190910_C1_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
## ||
         Total alignments: 756346
                                                                                   \Pi
         Successfully assigned alignments: 605566 (80.1%)
## ||
                                                                                   II
## ||
         Running time : 0.02 minutes
                                                                                   \Pi
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_CTCTCTAT_lib190910_H1_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   \Pi
## ||
         Total alignments: 107660
## ||
         Successfully assigned alignments: 94500 (87.8%)
                                                                                   \Pi
         Running time : 0.01 minutes
                                                                                   \Pi
## ||
## ||
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_GTAAGGAG_lib190910_F1_501T_d0_L001_ ... ||
        WARNING: Paired-end reads were found.
## ||
## ||
         Total alignments: 1029180
                                                                                   \Pi
         Successfully assigned alignments : 903184 (87.8%)
## ||
                                                                                   \Pi
## ||
         Running time : 0.02 minutes
                                                                                   II
## ||
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_TATCCTCT_lib190910_G1_501T_d0_L001_ ... ||
## ||
        WARNING: Paired-end reads were found.
                                                                                   \Pi
         Total alignments: 68420
                                                                                   \Pi
## ||
         Successfully assigned alignments: 58084 (84.9%)
                                                                                   \Pi
## ||
         Running time : 0.01 minutes
                                                                                   \Pi
## ||
## ||
                                                                                   \Pi
## || Process BAM file lane7055_TAAGGCGA_TCTCTCCG_lib190910_A1_501T_d0_L001_ ... ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
## ||
## ||
         Total alignments: 89592
                                                                                   \Pi
         Successfully assigned alignments: 77270 (86.2%)
                                                                                   \Pi
## ||
## ||
         Running time : 0.01 minutes
                                                                                   \prod
## ||
                                                                                   \Pi
## || Process BAM file lane7055_TAGGCATG_AAGGAGTA_lib190910_D6_501T_d42_L001 ... ||
## || WARNING: Paired-end reads were found.
                                                                                   \Pi
```

```
\prod
         Total alignments: 1298492
         Successfully assigned alignments : 1023297 (78.8%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7055_TAGGCATG_ACTGCATA_lib190910_E6_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 669184
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 542435 (81.1%)
                                                                                    | |
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_TAGGCATG_CGTCTAAT_lib190910_B6_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
                                                                                    II
## ||
         Total alignments: 400564
         Successfully assigned alignments: 340053 (84.9%)
## ||
                                                                                    П
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_TAGGCATG_CTAAGCCT_lib190910_C6_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1009396
                                                                                    II
## ||
         Successfully assigned alignments: 807429 (80.0%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7055_TAGGCATG_CTCTCTAT_lib190910_H6_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 13652
## ||
         Successfully assigned alignments: 10788 (79.0%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
                                                                                    \prod
## || Process BAM file lane7055_TAGGCATG_GTAAGGAG_lib190910_F6_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1233758
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1011116 (82.0%)
                                                                                    II
         Running time: 0.03 minutes
## ||
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7055_TAGGCATG_TATCCTCT_lib190910_G6_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 398666
                                                                                    II
## ||
         Successfully assigned alignments: 331924 (83.3%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7055 TAGGCATG TCTCTCCG lib190910 A6 501T d42 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 659898
                                                                                    II
## ||
         Successfully assigned alignments : 541025 (82.0%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.02 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7055_TCCTGAGC_AAGGAGTA_lib190910_D4_501T_d42_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 781236
                                                                                    II
         Successfully assigned alignments: 650070 (83.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7055_TCCTGAGC_ACTGCATA_lib190910_E4_501T_d42_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1400586
## ||
         Successfully assigned alignments: 1071568 (76.5%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7055_TCCTGAGC_CGTCTAAT_lib190910_B4_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 632122
                                                                                    II
## ||
         Successfully assigned alignments: 481368 (76.2%)
                                                                                    | |
## ||
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_TCCTGAGC_CTAAGCCT_lib190910_C4_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1438946
                                                                                    II
         Successfully assigned alignments: 1185268 (82.4%)
## ||
                                                                                    П
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7055_TCCTGAGC_CTCTCTAT_lib190910_H4_501T_d42_L001 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1010698
                                                                                    II
## ||
         Successfully assigned alignments: 861943 (85.3%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7055_TCCTGAGC_GTAAGGAG_lib190910_F4_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2811778
## ||
         Successfully assigned alignments: 2351996 (83.6%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane7055_TCCTGAGC_TATCCTCT_lib190910_G4_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
         Total alignments: 2009844
## ||
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1615528 (80.4%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7055_TCCTGAGC_TCTCTCCG_lib190910_A4_501T_d42_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1398976
                                                                                    II
## ||
         Successfully assigned alignments: 1175511 (84.0%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052 AAGAGGCA AAGGAGTA cDNA190916 D9 665X d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 5494760
                                                                                    II
## ||
         Successfully assigned alignments : 4648151 (84.6%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.08 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7052_AAGAGGCA_ACTGCATA_cDNA190916_E9_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1901102
                                                                                    II
         Successfully assigned alignments: 1338791 (70.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_AAGAGGCA_CGTCTAAT_cDNA190916_B9_665X_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 4844
         Successfully assigned alignments : 782 (16.1\%)
## ||
                                                                                    II
## ||
         Running time: 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_AAGAGGCA_CTAAGCCT_cDNA190916_C9_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 2778286
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 2323023 (83.6%)
                                                                                    | |
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_AAGAGGCA_CTCTCTAT_cDNA190916_H9_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 19688
                                                                                    II
         Successfully assigned alignments: 15252 (77.5%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_AAGAGGCA_GTAAGGAG_cDNA190916_F9_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 2998490
                                                                                    II
## ||
         Successfully assigned alignments: 2370723 (79.1%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7052_AAGAGGCA_TATCCTCT_cDNA190916_G9_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 6095674
## ||
         Successfully assigned alignments: 5221036 (85.7%)
                                                                                    II
## ||
         Running time : 0.08 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane7052_AAGAGGCA_TCTCTCCG_cDNA190916_A9_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
         Total alignments: 7081478
## ||
                                                                                    \Pi
## ||
         Successfully assigned alignments : 5259253 (74.3%)
                                                                                    II
## ||
         Running time: 0.09 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7052_AGGCAGAA_AAGGAGTA_cDNA190916_D3_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1738786
                                                                                    II
## ||
         Successfully assigned alignments: 1437103 (82.6%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 AGGCAGAA ACTGCATA cDNA190916 E3 665X d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1078012
                                                                                    II
## ||
         Successfully assigned alignments: 801093 (74.3%)
                                                                                    \prod
## ||
         Running time : 0.03 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane7052_AGGCAGAA_CGTCTAAT_cDNA190916_B3_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2282
                                                                                    II
         Successfully assigned alignments : 120 (5.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_AGGCAGAA_CTAAGCCT_cDNA190916_C3_665X_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2119944
         Successfully assigned alignments : 1813734 (85.6%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_AGGCAGAA_CTCTCTAT_cDNA190916_H3_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 127356
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 101526 (79.7%)
                                                                                    | |
## ||
         Running time: 0.01 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_AGGCAGAA_GTAAGGAG_cDNA190916_F3_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 240722
         Successfully assigned alignments: 182268 (75.7%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_AGGCAGAA_TATCCTCT_cDNA190916_G3_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 3700948
                                                                                    II
## ||
         Successfully assigned alignments: 2877707 (77.8%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7052_AGGCAGAA_TCTCTCCCG_cDNA190916_A3_652H_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2556
## ||
         Successfully assigned alignments: 135 (5.3%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7052_ATCTCAGG_AAGGAGTA_cDNA190916_D12_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 13566442
                                                                                    \Pi
## ||
         Successfully assigned alignments: 10153975 (74.8%)
                                                                                    II
## ||
         Running time : 0.16 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane7052_ATCTCAGG_ACTGCATA_cDNA190916_E12_665X_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 14680444
                                                                                    II
## ||
         Successfully assigned alignments: 12375673 (84.3%)
                                                                                    II
## ||
         Running time: 0.17 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052 ATCTCAGG CGTCTAAT cDNA190916 B12 665X d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 10595834
                                                                                    II
## ||
         Successfully assigned alignments : 7500627 (70.8%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.12 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7052_ATCTCAGG_CTAAGCCT_cDNA190916_C12_665X_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 12300
                                                                                    II
         Successfully assigned alignments: 548 (4.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7052_ATCTCAGG_CTCTCTAT_cDNA190916_H12_665X_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 9559858
         Successfully assigned alignments : 8142660 (85.2\%)
## ||
                                                                                    II
## ||
         Running time: 0.11 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_ATCTCAGG_GTAAGGAG_cDNA190916_F12_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 5021114
## ||
                                                                                    II
         Successfully assigned alignments: 3849809 (76.7%)
                                                                                    | |
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_ATCTCAGG_TATCCTCT_cDNA190916_G12_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 8888980
## ||
                                                                                    II
         Successfully assigned alignments: 7297988 (82.1%)
## ||
                                                                                    П
## ||
         Running time : 0.10 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_ATCTCAGG_TCTCTCCG_cDNA190916_A12_665X_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments: 35376
                                                                                    II
## ||
         Successfully assigned alignments: 1392 (3.9%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7052_CGAGGCTG_AAGGAGTA_cDNA190916_D8_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 722
## ||
         Successfully assigned alignments: 50 (6.9%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7052_CGAGGCTG_ACTGCATA_cDNA190916_E8_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 664
                                                                                    \Pi
## ||
         Successfully assigned alignments: 44 (6.6%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane7052_CGAGGCTG_CGTCTAAT_cDNA190916_B8_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1280
                                                                                    \Pi
## ||
         Successfully assigned alignments: 85 (6.6%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 CGAGGCTG CTAAGCCT cDNA190916 C8 665X d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1938
                                                                                    II
## ||
         Successfully assigned alignments : 114 (5.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.00 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CGAGGCTG_CTCTCTAT_cDNA190916_H8_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1632
                                                                                    \Pi
         Successfully assigned alignments : 64 (3.9%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_CGAGGCTG_GTAAGGAG_cDNA190916_F8_665X_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 626
         Successfully assigned alignments: 38 (6.1%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_CGAGGCTG_TATCCTCT_cDNA190916_G8_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 850
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 64 (7.5%)
                                                                                    | |
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CGAGGCTG_TCTCTCCG_cDNA190916_A8_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 5286
                                                                                    II
         Successfully assigned alignments: 286 (5.4%)
## ||
                                                                                    П
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CGTACTAG_AAGGAGTA_cDNA190916_D2_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 45126
                                                                                    II
## ||
         Successfully assigned alignments: 35001 (77.6%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7052_CGTACTAG_ACTGCATA_cDNA190916_E2_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 36038
                                                                                    | |
## ||
         Successfully assigned alignments: 20826 (57.8%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
                                                                                    \prod
## || Process BAM file lane7052_CGTACTAG_CGTCTAAT_cDNA190916_B2_652H_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 44246
                                                                                    \Pi
## ||
         Successfully assigned alignments: 29526 (66.7%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane7052_CGTACTAG_CTAAGCCT_cDNA190916_C2_665X_d42 L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 8748
                                                                                    II
## ||
         Successfully assigned alignments: 5060 (57.8%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 CGTACTAG CTCTCTAT cDNA190916 H2 665X d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1328
                                                                                    II
## ||
         Successfully assigned alignments: 57 (4.3%)
                                                                                    \prod
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CGTACTAG_GTAAGGAG_cDNA190916_F2_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1030
                                                                                    II
         Successfully assigned alignments: 199 (19.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_CGTACTAG_TATCCTCT_cDNA190916_G2_665X_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 80648
         Successfully assigned alignments : 65615 (81.4%)
## ||
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_CGTACTAG_TCTCTCCG_cDNA190916_A2_652H_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 2482
                                                                                    II
## ||
         Successfully assigned alignments : 254 (10.2%)
                                                                                    | |
## ||
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CTCTCTAC_AAGGAGTA_cDNA190916_D7_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 856
                                                                                    II
         Successfully assigned alignments: 56 (6.5%)
## ||
                                                                                    П
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CTCTCTAC_ACTGCATA_cDNA190916_E7_665X_d0_L001 ...
         WARNING: Paired-end reads were found.
         Total alignments: 934
                                                                                    II
## ||
         Successfully assigned alignments: 83 (8.9%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7052_CTCTCTAC_CGTCTAAT_cDNA190916_B7_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 3344
## ||
         Successfully assigned alignments: 176 (5.3%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CTCTCTAC_CTAAGCCT_cDNA190916_C7_665X_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1360
                                                                                    \Pi
## ||
         Successfully assigned alignments : 55 (4.0%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7052 CTCTCTAC CTCTCTAT cDNA190916 H7 665X d42 L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 8784
                                                                                    II
## ||
         Successfully assigned alignments: 386 (4.4%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 CTCTCTAC GTAAGGAG cDNA190916 F7 665X d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 876
                                                                                    II
## ||
         Successfully assigned alignments : 69 (7.9%)
                                                                                    \prod
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane7052_CTCTCTAC_TATCCTCT_cDNA190916_G7_665X_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1244
                                                                                    \Pi
         Successfully assigned alignments : 72 (5.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_CTCTCTAC_TCTCTCCG_cDNA190916_A7_665X_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 4658
         Successfully assigned alignments : 212 (4.6%)
## ||
                                                                                    II
## ||
         Running time: 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_GCTCATGA_AAGGAGTA_cDNA190916_D11_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 970268
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 782258 (80.6%)
                                                                                    | |
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GCTCATGA_ACTGCATA_cDNA190916_E11_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 6625100
                                                                                    II
         Successfully assigned alignments: 4872874 (73.6%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.09 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GCTCATGA_CGTCTAAT_cDNA190916_B11_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 15658
                                                                                    II
## ||
         Successfully assigned alignments: 740 (4.7%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7052_GCTCATGA_CTAAGCCT_cDNA190916_C11_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 501778
## ||
         Successfully assigned alignments: 400587 (79.8%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7052_GCTCATGA_CTCTCTAT_cDNA190916_H11_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 48394
                                                                                    \Pi
## ||
         Successfully assigned alignments: 38998 (80.6%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GCTCATGA_GTAAGGAG_cDNA190916_F11_665X_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 583664
                                                                                    II
## ||
         Successfully assigned alignments: 490812 (84.1%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 GCTCATGA TATCCTCT cDNA190916 G11 665X d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 3693372
                                                                                    II
## ||
         Successfully assigned alignments : 849292 (23.0%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GCTCATGA_TCTCTCCG_cDNA190916_A11_665X_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 14710
                                                                                    II
         Successfully assigned alignments: 632 (4.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7052_GGACTCCT_AAGGAGTA_cDNA190916_D5_665X_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 944
         Successfully assigned alignments : 260 (27.5%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_GGACTCCT_ACTGCATA_cDNA190916_E5_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1238724
## ||
                                                                                    II
         Successfully assigned alignments: 807540 (65.2%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GGACTCCT_CGTCTAAT_cDNA190916_B5_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3050
                                                                                    II
         Successfully assigned alignments: 926 (30.4%)
                                                                                    П
## ||
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
## || Process BAM file lane7052_GGACTCCT_CTAAGCCT_cDNA190916_C5_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 968996
                                                                                    II
## ||
         Successfully assigned alignments: 835632 (86.2%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    | |
## || Process BAM file lane7052_GGACTCCT_CTCTCTAT_cDNA190916_H5_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 5466388
                                                                                    | |
## ||
         Successfully assigned alignments: 4577840 (83.7%)
                                                                                    II
## ||
         Running time : 0.08 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7052_GGACTCCT_GTAAGGAG_cDNA190916_F5_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 109854
                                                                                    \Pi
## ||
         Successfully assigned alignments: 85520 (77.8%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GGACTCCT_TATCCTCT_cDNA190916_G5_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 493096
                                                                                    II
## ||
         Successfully assigned alignments: 378090 (76.7%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 GGACTCCT TCTCTCCG cDNA190916 A5 665X d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 1472
         Successfully assigned alignments: 338 (23.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_GTAGAGGA_AAGGAGTA_cDNA190916_D10_665X_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 3960468
                                                                                    II
         Successfully assigned alignments: 3232121 (81.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_GTAGAGGA_ACTGCATA_cDNA190916_E10_665X_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 3657142
## ||
         Successfully assigned alignments: 2876830 (78.7%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_GTAGAGGA_CGTCTAAT_cDNA190916_B10_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 18487056
                                                                                    II
## ||
         Successfully assigned alignments: 16171516 (87.5%)
                                                                                    | |
## ||
## ||
         Running time: 0.20 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GTAGAGGA_CTAAGCCT_cDNA190916_C10_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 9117414
                                                                                    II
         Successfully assigned alignments: 7199107 (79.0%)
## ||
                                                                                    П
## ||
         Running time : 0.11 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GTAGAGGA_CTCTCTAT_cDNA190916_H10_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 11228
                                                                                    II
## ||
         Successfully assigned alignments: 6177 (55.0%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7052_GTAGAGGA_GTAAGGAG_cDNA190916_F10_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 7625482
## ||
         Successfully assigned alignments: 6575333 (86.2%)
                                                                                    II
## ||
         Running time : 0.10 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7052_GTAGAGGA_TATCCTCT_cDNA190916_G10_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 9885984
                                                                                    \Pi
## ||
         Successfully assigned alignments: 8554779 (86.5%)
                                                                                    II
## ||
         Running time : 0.12 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7052_GTAGAGGA_TCTCTCCG_cDNA190916_A10_665X_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 9287942
                                                                                    II
## ||
         Successfully assigned alignments: 7351537 (79.2%)
                                                                                    II
## ||
         Running time : 0.11 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 TAAGGCGA AAGGAGTA cDNA190916 D1 665X d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2789576
                                                                                    II
## ||
         Successfully assigned alignments : 2409713 (86.4%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TAAGGCGA_ACTGCATA_cDNA190916_E1_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 23942
                                                                                    II
         Successfully assigned alignments: 18174 (75.9%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_TAAGGCGA_CGTCTAAT_cDNA190916_B1_652H_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1784900
         Successfully assigned alignments : 1576386 (88.3%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_TAAGGCGA_CTAAGCCT_cDNA190916_C1_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 10812
                                                                                    II
## ||
         Successfully assigned alignments : 6740 (62.3%)
                                                                                    | |
## ||
         Running time : 0.00 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TAAGGCGA_CTCTCTAT_cDNA190916_H1_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4178
                                                                                    II
         Successfully assigned alignments: 622 (14.9%)
## ||
                                                                                    П
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TAAGGCGA_GTAAGGAG_cDNA190916_F1_665X_d42_L00 \dots
         WARNING: Paired-end reads were found.
         Total alignments: 12110
                                                                                    II
## ||
         Successfully assigned alignments: 9597 (79.2%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7052_TAAGGCGA_TATCCTCT_cDNA190916_G1_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 1926
## ||
         Successfully assigned alignments: 270 (14.0%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TAAGGCGA_TCTCTCCG_cDNA190916_A1_652H_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1585966
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1365221 (86.1%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TAGGCATG_AAGGAGTA_cDNA190916_D6_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1130634
                                                                                    II
## ||
         Successfully assigned alignments: 882979 (78.1%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 TAGGCATG ACTGCATA cDNA190916 E6 665X d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4903874
                                                                                    II
## ||
         Successfully assigned alignments : 4182677 (85.3%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.07 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TAGGCATG_CGTCTAAT_cDNA190916_B6_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 9486
                                                                                    II
         Successfully assigned alignments : 5465 (57.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_TAGGCATG_CTAAGCCT_cDNA190916_C6_665X_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1382
         Successfully assigned alignments : 76 (5.5%)
## ||
                                                                                    II
         Running time : 0.00 minutes
## ||
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_TAGGCATG_CTCTCTAT_cDNA190916_H6_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 4433050
## ||
                                                                                    II
         Successfully assigned alignments: 3809332 (85.9%)
                                                                                    | |
## ||
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TAGGCATG_GTAAGGAG_cDNA190916_F6_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1435502
                                                                                    II
         Successfully assigned alignments: 963033 (67.1%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7052_TAGGCATG_TATCCTCT_cDNA190916_G6_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 503174
                                                                                    II
## ||
         Successfully assigned alignments: 382536 (76.0%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7052_TAGGCATG_TCTCTCCG_cDNA190916_A6_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 6019962
                                                                                    | |
## ||
         Successfully assigned alignments: 5266382 (87.5%)
                                                                                    II
## ||
         Running time : 0.08 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TCCTGAGC_AAGGAGTA_cDNA190916_D4_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 663048
                                                                                    \Pi
## ||
         Successfully assigned alignments: 580489 (87.5%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TCCTGAGC_ACTGCATA_cDNA190916_E4_665X_d42 L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1927812
                                                                                    II
## ||
         Successfully assigned alignments: 1631026 (84.6%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7052 TCCTGAGC CGTCTAAT cDNA190916 B4 665X d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 1450
         Successfully assigned alignments : 76 (5.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_TCCTGAGC_CTAAGCCT_cDNA190916_C4_665X_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 10698
                                                                                    II
         Successfully assigned alignments : 6825 (63.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7052_TCCTGAGC_CTCTCTAT_cDNA190916_H4_665X_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1252
         Successfully assigned alignments : 82 (6.5%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7052_TCCTGAGC_GTAAGGAG_cDNA190916_F4_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 2397394
                                                                                    II
## ||
         Successfully assigned alignments: 1995954 (83.3%)
## ||
                                                                                    | |
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TCCTGAGC_TATCCTCT_cDNA190916_G4_665X_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 193090
         Successfully assigned alignments: 144738 (75.0%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7052_TCCTGAGC_TCTCTCCG_cDNA190916_A4_652H_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1175254
                                                                                    II
## ||
         Successfully assigned alignments: 954850 (81.2%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7023_AAGAGGCA_AAGGAGTA_cDNA190917_D9_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 336982
## ||
         Successfully assigned alignments: 249329 (74.0%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AAGAGGCA_ACTGCATA_cDNA190917_E9_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
         Total alignments: 297990
## ||
                                                                                    \Pi
## ||
         Successfully assigned alignments: 225667 (75.7%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AAGAGGCA_CGTCTAAT_cDNA190917_B9_643Y_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 6340
                                                                                    II
## ||
         Successfully assigned alignments: 4113 (64.9%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 AAGAGGCA CTAAGCCT cDNA190917 C9 643Y d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2404
                                                                                    II
## ||
         Successfully assigned alignments: 1643 (68.3%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.00 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AAGAGGCA_CTCTCTAT_cDNA190917_H9_627F_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1935996
                                                                                    II
         Successfully assigned alignments: 1618453 (83.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AAGAGGCA_GTAAGGAG_cDNA190917_F9_627F_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1870716
         Successfully assigned alignments : 1469908 (78.6%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_AAGAGGCA_TATCCTCT_cDNA190917_G9_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 763024
                                                                                    II
## ||
         Successfully assigned alignments : 611003 (80.1%)
                                                                                    | |
## ||
         Running time : 0.02 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AAGAGGCA_TCTCTCCG_cDNA190917_A9_643Y_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 35084
                                                                                    II
         Successfully assigned alignments: 24018 (68.5%)
                                                                                    \Pi
## ||
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AGGCAGAA_AAGGAGTA_cDNA190917_D3_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 3073640
                                                                                    II
## ||
         Successfully assigned alignments: 2618618 (85.2%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023_AGGCAGAA_ACTGCATA_cDNA190917_E3_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 326456
                                                                                    | |
## ||
         Successfully assigned alignments: 272760 (83.6%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AGGCAGAA_CGTCTAAT_cDNA190917_B3_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 260322
                                                                                    \Pi
## ||
         Successfully assigned alignments: 204103 (78.4%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AGGCAGAA_CTAAGCCT_cDNA190917_C3_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2593660
                                                                                    II
## ||
         Successfully assigned alignments: 2219687 (85.6%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 AGGCAGAA CTCTCTAT cDNA190917 H3 627F d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 614
                                                                                    II
## ||
         Successfully assigned alignments : 286 (46.6%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.00 minutes
## ||
                                                                                    | |
## || Process BAM file lane7023_AGGCAGAA_GTAAGGAG_cDNA190917_F3_627F_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1850168
                                                                                    II
         Successfully assigned alignments: 1563045 (84.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_AGGCAGAA_TATCCTCT_cDNA190917_G3_627F_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2207420
         Successfully assigned alignments : 1836752 (83.2%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_AGGCAGAA_TCTCTCCG_cDNA190917_A3_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 321380
                                                                                    II
## ||
         Successfully assigned alignments : 250884 (78.1%)
                                                                                    | |
## ||
         Running time : 0.02 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_ATCTCAGG_AAGGAGTA_cDNA190917_D12_643Y_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1106712
                                                                                    II
         Successfully assigned alignments: 853402 (77.1%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_ATCTCAGG_ACTGCATA_cDNA190917_E12_627F_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments: 432
                                                                                    II
## ||
         Successfully assigned alignments: 45 (10.4%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7023_ATCTCAGG_CGTCTAAT_cDNA190917_B12_643Y_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 9494174
## ||
         Successfully assigned alignments: 7602463 (80.1%)
                                                                                    II
## ||
         Running time : 0.11 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_ATCTCAGG_CTAAGCCT_cDNA190917_C12_643Y_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 5249290
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3888171 (74.1%)
                                                                                    II
## ||
         Running time: 0.07 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_ATCTCAGG_CTCTCTAT_cDNA190917_H12_594V_d0_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 489310
                                                                                    \Pi
## ||
         Successfully assigned alignments: 399690 (81.7%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 ATCTCAGG GTAAGGAG cDNA190917 F12 627F d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1563988
                                                                                    II
## ||
         Successfully assigned alignments : 1184070 (75.7%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7023_ATCTCAGG_TATCCTCT_cDNA190917_G12_627F_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 86508
                                                                                    II
         Successfully assigned alignments: 66268 (76.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_ATCTCAGG_TCTCTCCG_cDNA190917_A12_643Y_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 17439292
         Successfully assigned alignments : 14615031 (83.8%)
## ||
                                                                                    II
## ||
         Running time: 0.19 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_CGAGGCTG_AAGGAGTA_cDNA190917_D8_643Y_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 158
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 22 (13.9%)
                                                                                    | |
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGAGGCTG_ACTGCATA_cDNA190917_E8_594V_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2520330
## ||
                                                                                    II
         Successfully assigned alignments: 1934542 (76.8%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGAGGCTG_CGTCTAAT_cDNA190917_B8_643Y_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 28058
                                                                                    II
## ||
         Successfully assigned alignments: 22148 (78.9%)
## ||
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7023_CGAGGCTG_CTAAGCCT_cDNA190917_C8_643Y_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 71528
## ||
         Successfully assigned alignments: 58811 (82.2%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    \prod
                                                                                    \prod
## ||
## || Process BAM file lane7023_CGAGGCTG_CTCTCTAT_cDNA190917_H8_594V_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
         Total alignments: 2243976
## ||
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1880455 (83.8%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7023_CGAGGCTG_GTAAGGAG_cDNA190917_F8_594V_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1794952
                                                                                    II
## ||
         Successfully assigned alignments: 1478112 (82.3%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023 CGAGGCTG TATCCTCT cDNA190917 G8 594V d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 6586316
                                                                                    II
## ||
         Successfully assigned alignments : 5567476 (84.5%)
                                                                                    \prod
## ||
         Running time : 0.09 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGAGGCTG_TCTCTCCCG_cDNA190917_A8_643Y_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 97916
                                                                                    \Pi
         Successfully assigned alignments: 77674 (79.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGTACTAG_AAGGAGTA_cDNA190917_D2_627F_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2494178
         Successfully assigned alignments : 2040644 (81.8%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_CGTACTAG_ACTGCATA_cDNA190917_E2_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments : 56160
## ||
                                                                                    II
         Successfully assigned alignments : 43283 (77.1%)
                                                                                    | |
## ||
         Running time : 0.01 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGTACTAG_CGTCTAAT_cDNA190917_B2_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 654246
                                                                                    II
         Successfully assigned alignments: 515815 (78.8%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGTACTAG_CTAAGCCT_cDNA190917_C2_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 69538
                                                                                    II
## ||
         Successfully assigned alignments: 55563 (79.9%)
## ||
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7023_CGTACTAG_CTCTCTAT_cDNA190917_H2_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2576
## ||
         Successfully assigned alignments: 1679 (65.2%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGTACTAG_GTAAGGAG_cDNA190917_F2_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1848976
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1520733 (82.2%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CGTACTAG_TATCCTCT_cDNA190917_G2_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 810182
                                                                                    II
## ||
         Successfully assigned alignments: 666961 (82.3%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 CGTACTAG TCTCTCCG cDNA190917 A2 627F d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 925068
                                                                                    II
## ||
         Successfully assigned alignments : 740125 (80.0%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    | |
## || Process BAM file lane7023_CTCTCTAC_AAGGAGTA_cDNA190917_D7_643Y_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 168
                                                                                    \Pi
         Successfully assigned alignments : 10 (6.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7023_CTCTCTAC_ACTGCATA_cDNA190917_E7_594V_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1021486
## ||
         Successfully assigned alignments: 851196 (83.3%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_CTCTCTAC_CGTCTAAT_cDNA190917_B7_643Y_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 11798
                                                                                    II
## ||
         Successfully assigned alignments: 9511 (80.6%)
                                                                                    | |
## ||
         Running time : 0.00 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CTCTCTAC_CTAAGCCT_cDNA190917_C7_643Y_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 16798
                                                                                    II
         Successfully assigned alignments: 12712 (75.7%)
                                                                                    П
## ||
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CTCTCTAC_CTCTCTAT_cDNA190917_H7_594V_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments : 3171500
                                                                                    II
## ||
         Successfully assigned alignments: 2269018 (71.5%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    II
## || Process BAM file lane7023_CTCTCTAC_GTAAGGAG_cDNA190917_F7_594V_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3831020
                                                                                    | |
## ||
         Successfully assigned alignments: 3221515 (84.1%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \prod
## ||
                                                                                    П
## || Process BAM file lane7023_CTCTCTAC_TATCCTCT_cDNA190917_G7_594V_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2677226
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2154941 (80.5%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7023_CTCTCTAC_TCTCTCCG_cDNA190917_A7_643Y_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 209744
                                                                                    \Pi
## ||
         Successfully assigned alignments: 169431 (80.8%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 GCTCATGA AAGGAGTA cDNA190917 D11 627F d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 126
                                                                                    II
         Successfully assigned alignments: 8 (6.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7023_GCTCATGA_ACTGCATA_cDNA190917_E11_627F_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 246
                                                                                    II
         Successfully assigned alignments: 19 (7.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7023_GCTCATGA_CGTCTAAT_cDNA190917_B11_643Y_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 6966060
         Successfully assigned alignments : 5481312 (78.7\%)
## ||
                                                                                    II
## ||
         Running time: 0.09 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_GCTCATGA_CTAAGCCT_cDNA190917_C11_643Y_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 35442
                                                                                    II
## ||
         Successfully assigned alignments: 1417 (4.0%)
                                                                                    | |
## ||
         Running time : 0.00 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GCTCATGA_CTCTCTAT_cDNA190917_H11_594V_d0_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 81252
                                                                                    II
         Successfully assigned alignments: 69495 (85.5%)
                                                                                    \Pi
## ||
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GCTCATGA_GTAAGGAG_cDNA190917_F11_627F_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 2052014
                                                                                    II
## ||
         Successfully assigned alignments: 1531970 (74.7%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    II
## || Process BAM file lane7023_GCTCATGA_TATCCTCT_cDNA190917_G11_627F_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3597640
                                                                                    | |
## ||
         Successfully assigned alignments: 2959810 (82.3%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GCTCATGA_TCTCTCCG_cDNA190917_A11_643Y_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 51520
                                                                                    \Pi
## ||
         Successfully assigned alignments: 41251 (80.1%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GGACTCCT_AAGGAGTA_cDNA190917_D5_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 772934
                                                                                    II
## ||
         Successfully assigned alignments: 639346 (82.7%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 GGACTCCT ACTGCATA cDNA190917 E5 627F d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3995806
                                                                                    II
## ||
         Successfully assigned alignments : 3424304 (85.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7023_GGACTCCT_CGTCTAAT_cDNA190917_B5_627F_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 491818
                                                                                    II
         Successfully assigned alignments: 366163 (74.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GGACTCCT_CTAAGCCT_cDNA190917_C5_627F_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2810
         Successfully assigned alignments : 2209 (78.6%)
## ||
                                                                                    II
## ||
         Running time: 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_GGACTCCT_CTCTCTAT_cDNA190917_H5_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 788034
                                                                                    II
## ||
         Successfully assigned alignments: 622098 (78.9%)
                                                                                    | |
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GGACTCCT_GTAAGGAG_cDNA190917_F5_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 866766
                                                                                    II
         Successfully assigned alignments: 735911 (84.9%)
## ||
                                                                                    П
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7023_GGACTCCT_TATCCTCT_cDNA190917_G5_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 4098864
                                                                                    II
## ||
         Successfully assigned alignments: 3389763 (82.7%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7023_GGACTCCT_TCTCTCCG_cDNA190917_A5_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 38998
                                                                                    | |
## ||
         Successfully assigned alignments: 31066 (79.7%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7023_GTAGAGGA_AAGGAGTA_cDNA190917_D10_627F_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 4816076
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3557460 (73.9%)
                                                                                    II
## ||
         Running time: 0.07 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GTAGAGGA_ACTGCATA_cDNA190917_E10_627F_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 19622
                                                                                    II
## ||
         Successfully assigned alignments: 14749 (75.2%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 GTAGAGGA CGTCTAAT cDNA190917 B10 643Y d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 1224676
                                                                                    II
## ||
         Successfully assigned alignments : 905039 (73.9%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GTAGAGGA_CTAAGCCT_cDNA190917_C10_643Y_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1181086
                                                                                    II
         Successfully assigned alignments: 903115 (76.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GTAGAGGA_CTCTCTAT_cDNA190917_H10_594V_d0_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 4819630
         Successfully assigned alignments : 4123606 (85.6%)
## ||
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_GTAGAGGA_GTAAGGAG_cDNA190917_F10_627F_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1267966
                                                                                    II
## ||
         Successfully assigned alignments : 964812 (76.1%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GTAGAGGA_TATCCTCT_cDNA190917_G10_627F_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1639704
                                                                                    II
         Successfully assigned alignments: 1220930 (74.5%)
## ||
                                                                                    П
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_GTAGAGGA_TCTCTCCG_cDNA190917_A10_643Y_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments: 8783886
                                                                                    II
## ||
         Successfully assigned alignments: 6795350 (77.4%)
## ||
                                                                                    II
## ||
         Running time : 0.11 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7023_TAAGGCGA_AAGGAGTA_cDNA190917_D1_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2994808
## ||
         Successfully assigned alignments: 2472265 (82.6%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TAAGGCGA_ACTGCATA_cDNA190917_E1_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 179526
                                                                                    \Pi
## ||
         Successfully assigned alignments: 147461 (82.1%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
## ||
                                                                                    11
## || Process BAM file lane7023_TAAGGCGA_CGTCTAAT_cDNA190917_B1_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 6241074
                                                                                    \Pi
## ||
         Successfully assigned alignments: 5319649 (85.2%)
                                                                                    II
## ||
         Running time: 0.08 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 TAAGGCGA CTAAGCCT cDNA190917 C1 627F d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1272114
                                                                                    II
## ||
         Successfully assigned alignments : 1070274 (84.1%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TAAGGCGA_CTCTCTAT_cDNA190917_H1_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 4738
                                                                                    \Pi
         Successfully assigned alignments : 3789 (80.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.00 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7023_TAAGGCGA_GTAAGGAG_cDNA190917_F1_627F_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2592328
         Successfully assigned alignments : 2295885 (88.6%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_TAAGGCGA_TATCCTCT_cDNA190917_G1_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1157456
                                                                                    II
## ||
         Successfully assigned alignments: 994672 (85.9%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TAAGGCGA_TCTCTCCG_cDNA190917_A1_627F_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4518
                                                                                    II
         Successfully assigned alignments: 2965 (65.6%)
                                                                                    П
## ||
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
## || Process BAM file lane7023_TAGGCATG_AAGGAGTA_cDNA190917_D6_627F_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 4213632
                                                                                    II
## ||
         Successfully assigned alignments: 3559993 (84.5%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
                                                                                    | |
## || Process BAM file lane7023_TAGGCATG_ACTGCATA_cDNA190917_E6_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 658746
                                                                                    | |
## ||
         Successfully assigned alignments: 510090 (77.4%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TAGGCATG_CGTCTAAT_cDNA190917_B6_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 592196
                                                                                    \Pi
## ||
         Successfully assigned alignments: 457032 (77.2%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TAGGCATG_CTAAGCCT_cDNA190917_C6_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 61140
                                                                                    II
## ||
         Successfully assigned alignments: 47149 (77.1%)
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7023 TAGGCATG CTCTCTAT cDNA190917 H6 627F d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 40522
         Successfully assigned alignments : 33527 (82.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7023_TAGGCATG_GTAAGGAG_cDNA190917_F6_627F_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 280366
                                                                                    II
         Successfully assigned alignments : 230146 (82.1%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7023_TAGGCATG_TATCCTCT_cDNA190917_G6_627F_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 3318574
## ||
         Successfully assigned alignments: 2597839 (78.3%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023_TAGGCATG_TCTCTCCG_cDNA190917_A6_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 6156776
                                                                                    II
## ||
         Successfully assigned alignments: 5127474 (83.3%)
                                                                                    | |
## ||
## ||
         Running time: 0.08 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TCCTGAGC_AAGGAGTA_cDNA190917_D4_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 323606
                                                                                    II
         Successfully assigned alignments: 253168 (78.2%)
## ||
                                                                                    П
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TCCTGAGC_ACTGCATA_cDNA190917_E4_627F_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 3567186
                                                                                    II
## ||
         Successfully assigned alignments: 3066373 (86.0%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7023_TCCTGAGC_CGTCTAAT_cDNA190917_B4_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 761944
## ||
         Successfully assigned alignments: 578597 (75.9%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TCCTGAGC_CTAAGCCT_cDNA190917_C4_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 635480
                                                                                    \Pi
## ||
         Successfully assigned alignments: 416805 (65.6%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7023_TCCTGAGC_CTCTCTAT_cDNA190917_H4_627F_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 830
                                                                                    II
## ||
         Successfully assigned alignments: 501 (60.4%)
                                                                                    II
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7023 TCCTGAGC GTAAGGAG cDNA190917 F4 627F d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 779720
                                                                                    II
## ||
         Successfully assigned alignments : 630096 (80.8%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.02 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TCCTGAGC_TATCCTCT_cDNA190917_G4_627F_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 4359054
                                                                                    II
         Successfully assigned alignments: 3777163 (86.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.07 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7023_TCCTGAGC_TCTCTCCG_cDNA190917_A4_627F_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
\prod
         Total alignments: 2888004
         Successfully assigned alignments : 2280312 (79.0%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_AAGAGGCA_AAGGAGTA_cDNA190919_D9_568R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2184726
                                                                                    II
## ||
         Successfully assigned alignments: 1767159 (80.9%)
                                                                                    | |
## ||
         Running time : 0.05 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_AAGAGGCA_ACTGCATA_cDNA190919_E9_568R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1945558
                                                                                    II
         Successfully assigned alignments: 1620077 (83.3%)
                                                                                    \Pi
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_AAGAGGCA_CGTCTAAT_cDNA190919_B9_568R_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 4958240
                                                                                    II
## ||
         Successfully assigned alignments: 4065222 (82.0%)
## ||
                                                                                    II
## ||
         Running time : 0.08 minutes
                                                                                    II
                                                                                    II
## || Process BAM file lane7035_AAGAGGCA_CTAAGCCT_cDNA190919_C9_568R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 2058418
## ||
         Successfully assigned alignments: 1640013 (79.7%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7035_AAGAGGCA_CTCTCTAT_cDNA190919_H9_568R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 3333600
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2736370 (82.1%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7035_AAGAGGCA_GTAAGGAG_cDNA190919_F9_568R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3305776
                                                                                    II
## ||
         Successfully assigned alignments: 2618488 (79.2%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 AAGAGGCA TATCCTCT cDNA190919 G9 568R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3415012
                                                                                    II
## ||
         Successfully assigned alignments : 2818882 (82.5%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.05 minutes
## ||
                                                                                    | |
## || Process BAM file lane7035_AAGAGGCA_TCTCTCCG_cDNA190919_A9_568R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 705564
                                                                                    II
         Successfully assigned alignments: 546455 (77.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_AGGCAGAA_AAGGAGTA_cDNA190919_D3_536G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1310040
         Successfully assigned alignments : 1084599 (82.8%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_AGGCAGAA_ACTGCATA_cDNA190919_E3_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | |
         Total alignments: 8
                                                                                    II
## ||
         Successfully assigned alignments : 4 (50.0%)
                                                                                    | |
## ||
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_AGGCAGAA_CGTCTAAT_cDNA190919_B3_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2202816
                                                                                    II
         Successfully assigned alignments: 1843521 (83.7%)
                                                                                    \Pi
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_AGGCAGAA_CTAAGCCT_cDNA190919_C3_536G_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1056812
                                                                                    II
## ||
         Successfully assigned alignments: 814338 (77.1%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_AGGCAGAA_CTCTCTAT_cDNA190919_H3_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1029638
                                                                                    | |
## ||
         Successfully assigned alignments: 810361 (78.7%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7035_AGGCAGAA_GTAAGGAG_cDNA190919_F3_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1994960
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1659143 (83.2%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7035_AGGCAGAA_TATCCTCT_cDNA190919_G3_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1425412
                                                                                    II
## ||
         Successfully assigned alignments: 1218353 (85.5%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 AGGCAGAA TCTCTCCG cDNA190919 A3 536G d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1076940
                                                                                    II
## ||
         Successfully assigned alignments : 896625 (83.3%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.03 minutes
## ||
                                                                                    | |
## || Process BAM file lane7035_ATCTCAGG_AAGGAGTA_cDNA190919_D12_568R_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1931160
                                                                                    II
         Successfully assigned alignments: 1317122 (68.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_ATCTCAGG_ACTGCATA_cDNA190919_E12_568R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1856370
         Successfully assigned alignments : 1356882 (73.1%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_ATCTCAGG_CGTCTAAT_cDNA190919_B12_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 3809410
                                                                                    II
## ||
         Successfully assigned alignments: 3061369 (80.4%)
                                                                                    | |
## ||
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_ATCTCAGG_CTAAGCCT_cDNA190919_C12_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 6108440
                                                                                    II
         Successfully assigned alignments: 4639725 (76.0%)
## ||
                                                                                    П
## ||
         Running time : 0.08 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_ATCTCAGG_CTCTCTAT_cDNA190919_H12_568R_d42_L0 \dots
         WARNING: Paired-end reads were found.
         Total alignments : 3078082
                                                                                    II
## ||
         Successfully assigned alignments: 2563155 (83.3%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_ATCTCAGG_GTAAGGAG_cDNA190919_F12_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
                                                                                    | |
         Total alignments: 4373336
## ||
         Successfully assigned alignments: 3461733 (79.2%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7035_ATCTCAGG_TATCCTCT_cDNA190919_G12_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 7452860
                                                                                    \Pi
## ||
         Successfully assigned alignments: 6089985 (81.7%)
                                                                                    II
## ||
         Running time : 0.10 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7035_ATCTCAGG_TCTCTCCG_cDNA190919_A12_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 5517586
                                                                                    II
## ||
         Successfully assigned alignments: 4523572 (82.0%)
                                                                                    II
## ||
         Running time: 0.08 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 CGAGGCTG AAGGAGTA cDNA190919 D8 568R d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1481216
                                                                                    II
## ||
         Successfully assigned alignments : 1217669 (82.2%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.04 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGAGGCTG_ACTGCATA_cDNA190919_E8_568R_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2026102
                                                                                    II
         Successfully assigned alignments: 1682518 (83.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGAGGCTG_CGTCTAAT_cDNA190919_B8_568R_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1978470
## ||
         Successfully assigned alignments: 1601700 (81.0%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_CGAGGCTG_CTAAGCCT_cDNA190919_C8_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1999078
## ||
                                                                                    II
         Successfully assigned alignments : 1642447 (82.2%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGAGGCTG_CTCTCTAT_cDNA190919_H8_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2743824
                                                                                    II
         Successfully assigned alignments: 2284746 (83.3%)
                                                                                    П
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGAGGCTG_GTAAGGAG_cDNA190919_F8_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1755420
                                                                                    II
## ||
         Successfully assigned alignments: 1459944 (83.2%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_CGAGGCTG_TATCCTCT_cDNA190919_G8_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
                                                                                    | |
## ||
         Total alignments: 2297308
## ||
         Successfully assigned alignments: 1935600 (84.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGAGGCTG_TCTCTCCG_cDNA190919_A8_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 3936608
                                                                                    \Pi
         Successfully assigned alignments : 3353897 (85.2%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGTACTAG_AAGGAGTA_cDNA190919_D2_536G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1464154
                                                                                    II
## ||
         Successfully assigned alignments: 1174357 (80.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 CGTACTAG ACTGCATA cDNA190919 E2 536G d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 589460
                                                                                    II
## ||
         Successfully assigned alignments : 464395 (78.8%)
                                                                                    \prod
## ||
                                                                                    \prod
## ||
         Running time : 0.02 minutes
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGTACTAG_CGTCTAAT_cDNA190919_B2_536G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 653140
                                                                                    \Pi
         Successfully assigned alignments : 544044 (83.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_CGTACTAG_CTAAGCCT_cDNA190919_C2_536G_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1862732
## ||
         Successfully assigned alignments: 1466138 (78.7%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_CGTACTAG_CTCTCTAT_cDNA190919_H2_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1462436
## ||
                                                                                    II
         Successfully assigned alignments: 1008080 (68.9%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGTACTAG_GTAAGGAG_cDNA190919_F2_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 714510
                                                                                    II
         Successfully assigned alignments: 520104 (72.8%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CGTACTAG_TATCCTCT_cDNA190919_G2_559G_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 259874
                                                                                    II
## ||
## ||
         Successfully assigned alignments: 172111 (66.2%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_CGTACTAG_TCTCTCCG_cDNA190919_A2_536G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
                                                                                    | |
## ||
         Total alignments: 1098210
## ||
         Successfully assigned alignments: 949059 (86.4%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CTCTCTAC_AAGGAGTA_cDNA190919_D7_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1843704
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1460046 (79.2%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7035_CTCTCTAC_ACTGCATA_cDNA190919_E7_568R_d0 L001 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 2366464
                                                                                    II
## ||
         Successfully assigned alignments: 1980580 (83.7%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 CTCTCTAC CGTCTAAT cDNA190919 B7 568R d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2540442
                                                                                    II
## ||
         Successfully assigned alignments : 2121198 (83.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CTCTCTAC_CTAAGCCT_cDNA190919_C7_568R_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 2736444
                                                                                    II
         Successfully assigned alignments: 2195407 (80.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_CTCTCTAC_CTCTCTAT_cDNA190919_H7_568R_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2237276
## ||
         Successfully assigned alignments: 1824573 (81.6%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_CTCTCTAC_GTAAGGAG_cDNA190919_F7_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 1549624
## ||
                                                                                    II
         Successfully assigned alignments: 1266004 (81.7%)
                                                                                    | |
## ||
         Running time : 0.05 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_CTCTCTAC_TATCCTCT_cDNA190919_G7_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2585354
                                                                                    II
         Successfully assigned alignments: 2060036 (79.7%)
                                                                                    П
## ||
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
                                                                                    П
## || Process BAM file lane7035_CTCTCTAC_TCTCTCCG_cDNA190919_A7_568R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1789862
## ||
                                                                                    11
         Successfully assigned alignments: 1496086 (83.6%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_GCTCATGA_AAGGAGTA_cDNA190919_D11_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2503156
                                                                                    | |
## ||
         Successfully assigned alignments: 1956968 (78.2%)
                                                                                    II
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
## ||
                                                                                    П
## || Process BAM file lane7035_GCTCATGA_ACTGCATA_cDNA190919_E11_568R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 3093360
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2651881 (85.7%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7035_GCTCATGA_CGTCTAAT_cDNA190919_B11_568R_d42 L0 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 4120530
                                                                                    II
## ||
         Successfully assigned alignments: 3082053 (74.8%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 GCTCATGA CTAAGCCT cDNA190919 C11 568R d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 4735964
                                                                                    II
         Successfully assigned alignments : 3826808 (80.8%)
## ||
                                                                                    | | |
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_GCTCATGA_CTCTCTAT_cDNA190919_H11_568R_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 7050094
                                                                                    II
         Successfully assigned alignments: 5877918 (83.4%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.09 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_GCTCATGA_GTAAGGAG_cDNA190919_F11_568R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
Total alignments: 3555976
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2876998 (80.9%)
                                                                                    II
         Running time: 0.06 minutes
## ||
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_GCTCATGA_TATCCTCT_cDNA190919_G11_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 3772472
## ||
                                                                                    II
         Successfully assigned alignments: 3166634 (83.9%)
## ||
                                                                                    | |
         Running time : 0.06 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_GCTCATGA_TCTCTCCG_cDNA190919_A11_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4716214
                                                                                    II
         Successfully assigned alignments: 3745470 (79.4%)
                                                                                    П
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
## || Process BAM file lane7035_GGACTCCT_AAGGAGTA_cDNA190919_D5_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1517496
## ||
                                                                                    11
         Successfully assigned alignments: 1214493 (80.0%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_GGACTCCT_ACTGCATA_cDNA190919_E5_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1463416
                                                                                    | |
## ||
         Successfully assigned alignments: 1207779 (82.5%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
## ||
                                                                                    П
## || Process BAM file lane7035_GGACTCCT_CGTCTAAT_cDNA190919_B5_536G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 2240956
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1848646 (82.5%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7035_GGACTCCT_CTAAGCCT_cDNA190919_C5_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1834518
                                                                                    II
## ||
         Successfully assigned alignments: 1512964 (82.5%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 GGACTCCT CTCTCTAT cDNA190919 H5 536G d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 2760042
                                                                                    II
         Successfully assigned alignments : 2287775 (82.9%)
## ||
                                                                                    | |
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_GGACTCCT_GTAAGGAG_cDNA190919_F5_536G_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 1556592
                                                                                    II
         Successfully assigned alignments: 1271842 (81.7%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7035_GGACTCCT_TATCCTCT_cDNA190919_G5_536G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1946082
         Successfully assigned alignments : 1445604 (74.3%)
## ||
                                                                                    II
         Running time: 0.04 minutes
## ||
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_GGACTCCT_TCTCTCCG_cDNA190919_A5_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 1962276
## ||
                                                                                    II
         Successfully assigned alignments : 1629126 (83.0%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_GTAGAGGA_AAGGAGTA_cDNA190919_D10_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1510406
                                                                                    II
         Successfully assigned alignments: 1136263 (75.2%)
                                                                                    П
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
## || Process BAM file lane7035_GTAGAGGA_ACTGCATA_cDNA190919_E10_568R_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 3001092
## ||
                                                                                    11
         Successfully assigned alignments: 2451745 (81.7%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_GTAGAGGA_CGTCTAAT_cDNA190919_B10_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 6248322
                                                                                    | |
## ||
         Successfully assigned alignments: 5056763 (80.9%)
                                                                                    II
         Running time : 0.08 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7035_GTAGAGGA_CTAAGCCT_cDNA190919_C10_568R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2204152
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1760108 (79.9%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7035_GTAGAGGA_CTCTCTAT_cDNA190919_H10_568R_d42 L0 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 4118184
                                                                                    II
## ||
         Successfully assigned alignments: 3366376 (81.7%)
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 GTAGAGGA GTAAGGAG cDNA190919 F10 568R d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 3165348
                                                                                    II
         Successfully assigned alignments : 2582280 (81.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_GTAGAGGA_TATCCTCT_cDNA190919_G10_568R_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 5358210
                                                                                    II
         Successfully assigned alignments: 4516965 (84.3%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.08 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_GTAGAGGA_TCTCTCCCG_cDNA190919_A10_568R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 3591022
## ||
         Successfully assigned alignments: 2916254 (81.2%)
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_TAAGGCGA_AAGGAGTA_cDNA190919_D1_536G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 1318942
## ||
                                                                                    II
         Successfully assigned alignments: 1074784 (81.5%)
                                                                                    | |
## ||
         Running time : 0.02 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_TAAGGCGA_ACTGCATA_cDNA190919_E1_536G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 806190
                                                                                    II
         Successfully assigned alignments: 676961 (84.0%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_TAAGGCGA_CGTCTAAT_cDNA190919_B1_536G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 2605570
                                                                                    II
## ||
         Successfully assigned alignments: 2200862 (84.5%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
                                                                                    | |
## || Process BAM file lane7035_TAAGGCGA_CTAAGCCT_cDNA190919_C1_536G_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1176026
                                                                                    | |
## ||
         Successfully assigned alignments: 884101 (75.2%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    П
## || Process BAM file lane7035_TAAGGCGA_CTCTCTAT_cDNA190919_H1_559G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1986264
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1377289 (69.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7035_TAAGGCGA_GTAAGGAG_cDNA190919_F1_559G_d42 L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 235722
                                                                                    II
## ||
         Successfully assigned alignments: 160518 (68.1%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 TAAGGCGA TATCCTCT cDNA190919 G1 559G d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 731370
                                                                                    II
         Successfully assigned alignments : 516723 (70.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_TAAGGCGA_TCTCTCCG_cDNA190919_A1_536G_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 868458
                                                                                    II
         Successfully assigned alignments: 735001 (84.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_TAGGCATG_AAGGAGTA_cDNA190919_D6_536G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1977220
         Successfully assigned alignments : 1632840 (82.6%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_TAGGCATG_ACTGCATA_cDNA190919_E6_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 1369118
## ||
                                                                                    II
         Successfully assigned alignments : 1127901 (82.4%)
                                                                                    | |
## ||
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_TAGGCATG_CGTCTAAT_cDNA190919_B6_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3400358
                                                                                    II
         Successfully assigned alignments: 2811055 (82.7%)
                                                                                    П
## ||
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
## || Process BAM file lane7035_TAGGCATG_CTAAGCCT_cDNA190919_C6_536G_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 2152238
                                                                                    II
## ||
         Successfully assigned alignments: 1823526 (84.7%)
## ||
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_TAGGCATG_CTCTCTAT_cDNA190919_H6_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1550934
                                                                                    | |
## ||
         Successfully assigned alignments: 1251747 (80.7%)
                                                                                    II
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    П
## || Process BAM file lane7035_TAGGCATG_GTAAGGAG_cDNA190919_F6_536G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 726586
                                                                                    \Pi
## ||
         Successfully assigned alignments : 604742 (83.2%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7035_TAGGCATG_TATCCTCT_cDNA190919_G6_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 2182512
                                                                                    II
## ||
         Successfully assigned alignments: 1710230 (78.4%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7035 TAGGCATG TCTCTCCG cDNA190919 A6 536G d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 3252006
## ||
                                                                                    II
         Successfully assigned alignments : 2736007 (84.1%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_TCCTGAGC_AAGGAGTA_cDNA190919_D4_536G_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 417868
                                                                                    II
         Successfully assigned alignments: 350358 (83.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7035_TCCTGAGC_ACTGCATA_cDNA190919_E4_536G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1309680
## ||
         Successfully assigned alignments: 1084381 (82.8%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7035_TCCTGAGC_CGTCTAAT_cDNA190919_B4_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1818364
## ||
                                                                                    II
         Successfully assigned alignments: 1615132 (88.8%)
                                                                                    | |
## ||
         Running time : 0.04 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7035_TCCTGAGC_CTAAGCCT_cDNA190919_C4_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1188612
                                                                                    II
         Successfully assigned alignments: 946215 (79.6%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7035_TCCTGAGC_CTCTCTAT_cDNA190919_H4_536G_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 255876
                                                                                    II
## ||
         Successfully assigned alignments: 210219 (82.2%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7035_TCCTGAGC_GTAAGGAG_cDNA190919_F4_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1261972
                                                                                    | |
## ||
         Successfully assigned alignments: 1061666 (84.1%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
## ||
                                                                                    П
## || Process BAM file lane7035_TCCTGAGC_TATCCTCT_cDNA190919_G4_536G_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 1397938
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1167704 (83.5%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7035_TCCTGAGC_TCTCTCCG_cDNA190919_A4_536G_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 2159700
                                                                                    II
## ||
         Successfully assigned alignments: 1801166 (83.4%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7043 AAGAGGCA AAGGAGTA cDNA190920 D9 602D d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2912780
## ||
                                                                                    II
         Successfully assigned alignments : 2447737 (84.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_AAGAGGCA_ACTGCATA_cDNA190920_E9_602D_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2110918
                                                                                    II
         Successfully assigned alignments: 1809767 (85.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_AAGAGGCA_CGTCTAAT_cDNA190920_B9_602D_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 4471042
## ||
         Successfully assigned alignments: 3708532 (82.9%)
                                                                                    II
## ||
         Running time: 0.06 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_AAGAGGCA_CTAAGCCT_cDNA190920_C9_602D_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 4031866
## ||
                                                                                    II
         Successfully assigned alignments : 3243347 (80.4%)
                                                                                    | |
## ||
         Running time : 0.06 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_AAGAGGCA_CTCTCTAT_cDNA190920_H9_602D_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2751752
                                                                                    II
         Successfully assigned alignments: 2430350 (88.3%)
                                                                                    П
## ||
## ||
         Running time : 0.05 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_AAGAGGCA_GTAAGGAG_cDNA190920_F9_602D_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1989720
                                                                                    II
## ||
         Successfully assigned alignments: 1712889 (86.1%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_AAGAGGCA_TATCCTCT_cDNA190920_G9_602D_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3124520
                                                                                    | |
## ||
         Successfully assigned alignments: 2395581 (76.7%)
                                                                                    II
         Running time : 0.05 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane7043_AAGAGGCA_TCTCTCCG_cDNA190920_A9_602D_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 3902234
                                                                                    \Pi
## ||
         Successfully assigned alignments: 3396441 (87.0%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7043_AGGCAGAA_AAGGAGTA_cDNA190920_D3_541M_d42 L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1321482
                                                                                    II
## ||
         Successfully assigned alignments: 1101770 (83.4%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7043 AGGCAGAA ACTGCATA cDNA190920 E3 541M d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 969042
                                                                                    II
         Successfully assigned alignments : 804783 (83.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_AGGCAGAA_CGTCTAAT_cDNA190920_B3_541M_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2239124
                                                                                    II
         Successfully assigned alignments: 1873618 (83.7%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_AGGCAGAA_CTAAGCCT_cDNA190920_C3_541M_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1455784
         Successfully assigned alignments : 1236676 (84.9%)
## ||
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_AGGCAGAA_CTCTCTAT_cDNA190920_H3_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
         Total alignments: 180
## ||
                                                                                    II
         Successfully assigned alignments: 92 (51.1%)
                                                                                    | |
## ||
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_AGGCAGAA_GTAAGGAG_cDNA190920_F3_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 941274
                                                                                    II
         Successfully assigned alignments: 800544 (85.0%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_AGGCAGAA_TATCCTCT_cDNA190920_G3_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 545190
                                                                                    II
## ||
         Successfully assigned alignments: 413404 (75.8%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_AGGCAGAA_TCTCTCCCG_cDNA190920_A3_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1711520
                                                                                    | |
## ||
         Successfully assigned alignments: 1423106 (83.1%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7043_ATCTCAGG_AAGGAGTA_cDNA190920_D12_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 7177142
                                                                                    \Pi
## ||
         Successfully assigned alignments: 6176667 (86.1%)
                                                                                    II
## ||
         Running time: 0.09 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7043_ATCTCAGG_ACTGCATA_cDNA190920_E12_602D_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 4882882
                                                                                    II
## ||
         Successfully assigned alignments: 4159182 (85.2%)
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    11
## || Process BAM file lane7043 ATCTCAGG CGTCTAAT cDNA190920 B12 602D d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 10480194
## ||
                                                                                    II
         Successfully assigned alignments : 9016579 (86.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.13 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_ATCTCAGG_CTAAGCCT_cDNA190920_C12_602D_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 8430806
                                                                                    II
         Successfully assigned alignments: 7249953 (86.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.11 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_ATCTCAGG_CTCTCTAT_cDNA190920_H12_602D_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
```

```
Total alignments: 5146932
                                                                                    \Pi
## ||
         Successfully assigned alignments: 4378028 (85.1%)
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_ATCTCAGG_GTAAGGAG_cDNA190920_F12_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 6233824
## ||
                                                                                    II
         Successfully assigned alignments : 5180548 (83.1%)
## ||
                                                                                    | |
         Running time : 0.09 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_ATCTCAGG_TATCCTCT_cDNA190920_G12_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 7087792
                                                                                    II
         Successfully assigned alignments: 6134393 (86.5%)
                                                                                    П
## ||
## ||
         Running time : 0.09 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_ATCTCAGG_TCTCTCCG_cDNA190920_A12_602D_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 6907290
## ||
                                                                                    11
         Successfully assigned alignments: 5953154 (86.2%)
## ||
                                                                                    II
## ||
         Running time : 0.09 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_CGAGGCTG_AAGGAGTA_cDNA190920_D8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1756106
                                                                                    | |
## ||
         Successfully assigned alignments: 1359044 (77.4%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
## ||
                                                                                    \Pi
## || Process BAM file lane7043_CGAGGCTG_ACTGCATA_cDNA190920_E8_562K_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 1569606
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1195865 (76.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7043_CGAGGCTG_CGTCTAAT_cDNA190920_B8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1995700
                                                                                    II
## ||
         Successfully assigned alignments: 1442422 (72.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7043 CGAGGCTG CTAAGCCT cDNA190920 C8 562K d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
                                                                                    II
## ||
         Total alignments: 1147190
         Successfully assigned alignments : 802356 (69.9%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_CGAGGCTG_CTCTCTAT_cDNA190920_H8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1862660
                                                                                    II
         Successfully assigned alignments: 1414256 (75.9%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_CGAGGCTG_GTAAGGAG_cDNA190920_F8_562K_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1188238
## ||
         Successfully assigned alignments: 873349 (73.5%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_CGAGGCTG_TATCCTCT_cDNA190920_G8_562K_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 1553260
## ||
                                                                                    II
         Successfully assigned alignments: 1167661 (75.2%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_CGAGGCTG_TCTCTCCG_cDNA190920_A8_602D_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2064170
                                                                                    II
         Successfully assigned alignments: 1753948 (85.0%)
                                                                                    П
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_CGTACTAG_AAGGAGTA_cDNA190920_D2_541M_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1164936
## ||
                                                                                    11
         Successfully assigned alignments: 1012533 (86.9%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_CGTACTAG_ACTGCATA_cDNA190920_E2_541M_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1092662
                                                                                    | |
## ||
         Successfully assigned alignments: 886054 (81.1%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7043_CGTACTAG_CGTCTAAT_cDNA190920_B2_541M_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 2907406
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2461455 (84.7%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    П
## ||
                                                                                    \Pi
## || Process BAM file lane7043_CGTACTAG_CTAAGCCT_cDNA190920_C2_541M_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1791112
                                                                                    II
## ||
         Successfully assigned alignments: 1506942 (84.1%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7043 CGTACTAG CTCTCTAT cDNA190920 H2 543P d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 926360
                                                                                    II
         Successfully assigned alignments : 694574 (75.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_CGTACTAG_GTAAGGAG_cDNA190920_F2_541M_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 944626
                                                                                    II
         Successfully assigned alignments: 816745 (86.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_CGTACTAG_TATCCTCT_cDNA190920_G2_543P_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1403796
## ||
         Successfully assigned alignments: 978760 (69.7%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_CGTACTAG_TCTCTCCG_cDNA190920_A2_541M_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1721778
## ||
                                                                                    II
         Successfully assigned alignments: 1385783 (80.5%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_CTCTCTAC_AAGGAGTA_cDNA190920_D7_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1910876
                                                                                    II
         Successfully assigned alignments: 1497295 (78.4%)
                                                                                    П
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_CTCTCTAC_ACTGCATA_cDNA190920_E7_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1395054
                                                                                    II
## ||
         Successfully assigned alignments: 1099307 (78.8%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_CTCTCTAC_CGTCTAAT_cDNA190920_B7_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1894158
                                                                                    | |
## ||
         Successfully assigned alignments: 1365477 (72.1%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    П
## || Process BAM file lane7043_CTCTCTAC_CTAAGCCT_cDNA190920_C7_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1975384
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1486703 (75.3%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7043_CTCTCTAC_CTCTCTAT_cDNA190920_H7_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 2322990
                                                                                    II
## ||
         Successfully assigned alignments: 1760709 (75.8%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    11
## || Process BAM file lane7043 CTCTCTAC GTAAGGAG cDNA190920 F7 543P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1373140
## ||
                                                                                    II
         Successfully assigned alignments : 1078676 (78.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_CTCTCTAC_TATCCTCT_cDNA190920_G7_543P_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1701768
                                                                                    II
         Successfully assigned alignments: 1348243 (79.2%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7043_CTCTCTAC_TCTCTCCG_cDNA190920_A7_602D_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 84350
         Successfully assigned alignments: 71352 (84.6%)
## ||
                                                                                   II
## ||
         Running time: 0.01 minutes
                                                                                   II
## ||
                                                                                   II
## || Process BAM file lane7043_GCTCATGA_AAGGAGTA_cDNA190920_D11_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                   | |
         Total alignments: 5671486
## ||
                                                                                   II
         Successfully assigned alignments: 4774764 (84.2%)
                                                                                   | |
## ||
## ||
         Running time: 0.08 minutes
                                                                                   II
## ||
                                                                                   \Pi
## || Process BAM file lane7043_GCTCATGA_ACTGCATA_cDNA190920_E11_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                   | |
## ||
         Total alignments: 3773546
                                                                                   II
         Successfully assigned alignments: 3212620 (85.1%)
                                                                                   П
## ||
## ||
         Running time : 0.06 minutes
                                                                                   II
## ||
## || Process BAM file lane7043_GCTCATGA_CGTCTAAT_cDNA190920_B11_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 9006882
                                                                                   II
## ||
         Successfully assigned alignments: 7620225 (84.6%)
## ||
                                                                                   II
## ||
         Running time : 0.12 minutes
                                                                                   \Pi
                                                                                   II
## || Process BAM file lane7043_GCTCATGA_CTAAGCCT_cDNA190920_C11_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   II
## ||
         Total alignments: 7937984
                                                                                   | |
## ||
         Successfully assigned alignments: 6666634 (84.0%)
                                                                                   II
## ||
         Running time : 0.10 minutes
                                                                                   \prod
                                                                                   \Pi
## || Process BAM file lane7043_GCTCATGA_CTCTCTAT_cDNA190920_H11_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   \Pi
## ||
         Total alignments: 4908512
                                                                                   \Pi
## ||
         Successfully assigned alignments: 4209220 (85.8%)
                                                                                   II
## ||
         Running time: 0.08 minutes
                                                                                   П
## ||
                                                                                   11
## || Process BAM file lane7043_GCTCATGA_GTAAGGAG_cDNA190920_F11_602D_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   | | |
## ||
         Total alignments: 3984284
                                                                                   II
## ||
         Successfully assigned alignments: 3325852 (83.5%)
                                                                                   II
## ||
         Running time : 0.06 minutes
                                                                                   II
## ||
                                                                                   11
## || Process BAM file lane7043 GCTCATGA TATCCTCT cDNA190920 G11 602D d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                   II
## ||
         Total alignments: 6434278
## ||
                                                                                   II
         Successfully assigned alignments : 5432567 (84.4%)
                                                                                   \prod
## ||
## ||
         Running time : 0.09 minutes
                                                                                   \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7043_GCTCATGA_TCTCTCCG_cDNA190920_A11_602D_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                   \Pi
## ||
## ||
         Total alignments : 6342250
                                                                                   II
         Successfully assigned alignments: 5507720 (86.8%)
                                                                                   \prod
## ||
## ||
         Running time : 0.09 minutes
                                                                                   \Pi
## ||
                                                                                   \Pi
## || Process BAM file lane7043_GGACTCCT_AAGGAGTA_cDNA190920_D5_541M_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                   \Pi
```

```
\prod
         Total alignments: 1576348
         Successfully assigned alignments : 1336097 (84.8%)
## ||
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_GGACTCCT_ACTGCATA_cDNA190920_E5_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 693800
## ||
                                                                                    II
         Successfully assigned alignments : 549903 (79.3%)
                                                                                    | |
## ||
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_GGACTCCT_CGTCTAAT_cDNA190920_B5_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2350690
                                                                                    II
         Successfully assigned alignments: 1979908 (84.2%)
                                                                                    П
## ||
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_GGACTCCT_CTAAGCCT_cDNA190920_C5_541M_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments : 1385156
                                                                                    II
## ||
         Successfully assigned alignments: 1164239 (84.1%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_GGACTCCT_CTCTCTAT_cDNA190920_H5_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 819306
                                                                                    | |
## ||
         Successfully assigned alignments: 661603 (80.8%)
                                                                                    II
         Running time : 0.02 minutes
                                                                                    \prod
                                                                                    П
## || Process BAM file lane7043_GGACTCCT_GTAAGGAG_cDNA190920_F5_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1032254
                                                                                    \Pi
## ||
         Successfully assigned alignments: 879304 (85.2%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7043_GGACTCCT_TATCCTCT_cDNA190920_G5_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1150466
                                                                                    II
## ||
         Successfully assigned alignments: 916391 (79.7%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043 GGACTCCT TCTCTCCG cDNA190920 A5 541M d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 1972476
                                                                                    II
## ||
         Successfully assigned alignments : 1681108 (85.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_GTAGAGGA_AAGGAGTA_cDNA190920_D10_602D_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 4240946
                                                                                    II
         Successfully assigned alignments: 3635732 (85.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_GTAGAGGA_ACTGCATA_cDNA190920_E10_602D_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 3305726
## ||
         Successfully assigned alignments: 2848460 (86.2%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_GTAGAGGA_CGTCTAAT_cDNA190920_B10_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 8009638
## ||
                                                                                    II
         Successfully assigned alignments : 6862664 (85.7%)
                                                                                    | |
## ||
         Running time : 0.10 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_GTAGAGGA_CTAAGCCT_cDNA190920_C10_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 5148734
                                                                                    II
         Successfully assigned alignments: 4356049 (84.6%)
                                                                                    П
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_GTAGAGGA_CTCTCTAT_cDNA190920_H10_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
         Total alignments : 4903430
                                                                                    II
## ||
         Successfully assigned alignments: 4033204 (82.3%)
## ||
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_GTAGAGGA_GTAAGGAG_cDNA190920_F10_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 2969750
                                                                                    | |
## ||
         Successfully assigned alignments: 2496454 (84.1%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7043_GTAGAGGA_TATCCTCT_cDNA190920_G10_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 3205994
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2729954 (85.2%)
                                                                                    II
## ||
         Running time : 0.05 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7043_GTAGAGGA_TCTCTCCG_cDNA190920_A10_602D_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 5107278
                                                                                    II
## ||
         Successfully assigned alignments: 4330912 (84.8%)
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7043 TAAGGCGA AAGGAGTA cDNA190920 D1 541M d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1149434
                                                                                    II
## ||
         Successfully assigned alignments : 962277 (83.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_TAAGGCGA_ACTGCATA_cDNA190920_E1_541M_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1293882
                                                                                    II
         Successfully assigned alignments: 1039585 (80.3%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_TAAGGCGA_CGTCTAAT_cDNA190920_B1_541M_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 2413532
         Successfully assigned alignments : 2023066 (83.8%)
## ||
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_TAAGGCGA_CTAAGCCT_cDNA190920_C1_541M_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 2016384
## ||
                                                                                    II
         Successfully assigned alignments : 1636293 (81.1%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_TAAGGCGA_CTCTCTAT_cDNA190920_H1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 577346
                                                                                    II
         Successfully assigned alignments: 451410 (78.2%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_TAAGGCGA_GTAAGGAG_cDNA190920_F1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 805332
                                                                                    II
## ||
         Successfully assigned alignments: 467398 (58.0%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_TAAGGCGA_TATCCTCT_cDNA190920_G1_543P_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1326574
                                                                                    | |
## ||
         Successfully assigned alignments: 1013244 (76.4%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7043_TAAGGCGA_TCTCTCCG_cDNA190920_A1_541M_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1367884
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1167074 (85.3%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7043_TAGGCATG_AAGGAGTA_cDNA190920_D6_541M_d42 L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 997346
                                                                                    II
## ||
         Successfully assigned alignments: 762883 (76.5%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7043 TAGGCATG ACTGCATA cDNA190920 E6 541M d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1110678
                                                                                    II
## ||
         Successfully assigned alignments : 863847 (77.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_TAGGCATG_CGTCTAAT_cDNA190920_B6_541M_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1905364
                                                                                    II
         Successfully assigned alignments: 1580688 (83.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_TAGGCATG_CTAAGCCT_cDNA190920_C6_541M_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1040876
## ||
         Successfully assigned alignments: 871516 (83.7%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_TAGGCATG_CTCTCTAT_cDNA190920_H6_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 776262
## ||
                                                                                    II
         Successfully assigned alignments: 597912 (77.0%)
                                                                                    | |
## ||
## ||
         Running time: 0.02 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_TAGGCATG_GTAAGGAG_cDNA190920_F6_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 659724
                                                                                    II
         Successfully assigned alignments: 504497 (76.5%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_TAGGCATG_TATCCTCT_cDNA190920_G6_541M_d42_L00 \dots
         WARNING: Paired-end reads were found.
         Total alignments: 137930
                                                                                    II
## ||
         Successfully assigned alignments: 110765 (80.3%)
## ||
                                                                                    II
## ||
         Running time : 0.01 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7043_TAGGCATG_TCTCTCCG_cDNA190920_A6_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1904248
                                                                                    | |
## ||
         Successfully assigned alignments: 1596259 (83.8%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    П
## || Process BAM file lane7043_TCCTGAGC_AAGGAGTA_cDNA190920_D4_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 504812
                                                                                    \Pi
## ||
         Successfully assigned alignments: 418169 (82.8%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7043_TCCTGAGC_ACTGCATA_cDNA190920_E4_541M_d42 L00 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 680030
                                                                                    II
## ||
         Successfully assigned alignments: 525376 (77.3%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043 TCCTGAGC CGTCTAAT cDNA190920 B4 541M d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1694300
                                                                                    II
## ||
         Successfully assigned alignments : 1452594 (85.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7043_TCCTGAGC_CTAAGCCT_cDNA190920_C4_541M_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 717158
                                                                                    II
         Successfully assigned alignments : 600730 (83.8%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7043_TCCTGAGC_CTCTCTAT_cDNA190920_H4_541M_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 290534
         Successfully assigned alignments : 234613 (80.8%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7043_TCCTGAGC_GTAAGGAG_cDNA190920_F4_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 1269816
## ||
                                                                                    II
         Successfully assigned alignments: 1064439 (83.8%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7043_TCCTGAGC_TATCCTCT_cDNA190920_G4_541M_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1214918
                                                                                    II
         Successfully assigned alignments: 991958 (81.6%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7043_TCCTGAGC_TCTCTCCG_cDNA190920_A4_541M_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1530658
                                                                                    II
## ||
         Successfully assigned alignments: 1294067 (84.5%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_AAGAGGCA_AAGGAGTA_cDNA190921_D9_660R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1889700
                                                                                    | |
## ||
         Successfully assigned alignments: 1478424 (78.2%)
                                                                                    II
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7048_AAGAGGCA_ACTGCATA_cDNA190921_E9_660R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2274244
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1886705 (83.0%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_AAGAGGCA_CGTCTAAT_cDNA190921_B9_660R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 4493338
                                                                                    II
## ||
         Successfully assigned alignments: 3603937 (80.2%)
                                                                                    II
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7048 AAGAGGCA CTAAGCCT cDNA190921 C9 660R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 2309326
## ||
                                                                                    II
         Successfully assigned alignments : 1834826 (79.5%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_AAGAGGCA_CTCTCTAT_cDNA190921_H9_660R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 2325716
                                                                                    II
         Successfully assigned alignments: 1714235 (73.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_AAGAGGCA_GTAAGGAG_cDNA190921_F9_660R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1981512
## ||
         Successfully assigned alignments: 1535493 (77.5%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_AAGAGGCA_TATCCTCT_cDNA190921_G9_660R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2790442
## ||
                                                                                    II
         Successfully assigned alignments : 2259769 (81.0%)
                                                                                    | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_AAGAGGCA_TCTCTCCG_cDNA190921_A9_660R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1681204
                                                                                    II
         Successfully assigned alignments: 1255476 (74.7%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_AGGCAGAA_AAGGAGTA_cDNA190921_D3_637R_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 928502
                                                                                    II
## ||
         Successfully assigned alignments: 732576 (78.9%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_AGGCAGAA_ACTGCATA_cDNA190921_E3_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 910522
                                                                                    | |
## ||
         Successfully assigned alignments: 745975 (81.9%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7048_AGGCAGAA_CGTCTAAT_cDNA190921_B3_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1358648
                                                                                    \Pi
## ||
         Successfully assigned alignments: 991573 (73.0%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_AGGCAGAA_CTAAGCCT_cDNA190921_C3_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1355162
                                                                                    II
## ||
         Successfully assigned alignments: 1138040 (84.0%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048 AGGCAGAA CTCTCTAT cDNA190921 H3 637R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 994918
                                                                                    II
## ||
         Successfully assigned alignments : 787049 (79.1%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_AGGCAGAA_GTAAGGAG_cDNA190921_F3_637R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 831482
                                                                                    II
         Successfully assigned alignments: 652122 (78.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_AGGCAGAA_TATCCTCT_cDNA190921_G3_637R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1128596
## ||
         Successfully assigned alignments: 928340 (82.3%)
                                                                                    II
## ||
         Running time: 0.04 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_AGGCAGAA_TCTCTCCCG_cDNA190921_A3_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 1655884
## ||
                                                                                    II
         Successfully assigned alignments: 1316280 (79.5%)
                                                                                    | |
## ||
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_ATCTCAGG_AAGGAGTA_cDNA190921_D12_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 5308716
                                                                                    II
         Successfully assigned alignments: 3632685 (68.4%)
                                                                                    П
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_ATCTCAGG_ACTGCATA_cDNA190921_E12_660R_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments: 4537020
                                                                                    II
## ||
         Successfully assigned alignments: 3459465 (76.2%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_ATCTCAGG_CGTCTAAT_cDNA190921_B12_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 9940628
                                                                                    | |
## ||
         Successfully assigned alignments: 8238732 (82.9%)
                                                                                    II
         Running time : 0.12 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7048_ATCTCAGG_CTAAGCCT_cDNA190921_C12_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 8120546
                                                                                    \Pi
## ||
         Successfully assigned alignments: 6875305 (84.7%)
                                                                                    II
## ||
         Running time : 0.11 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_ATCTCAGG_CTCTCTAT_cDNA190921_H12_660R_d42 L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 6364230
                                                                                    II
## ||
         Successfully assigned alignments: 5206934 (81.8%)
                                                                                    II
## ||
         Running time : 0.09 minutes
                                                                                    II
## ||
                                                                                    11
## || Process BAM file lane7048 ATCTCAGG GTAAGGAG cDNA190921 F12 660R d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    II
## ||
         Total alignments: 4191730
## ||
                                                                                    II
         Successfully assigned alignments : 3188534 (76.1%)
                                                                                    \prod
## ||
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_ATCTCAGG_TATCCTCT_cDNA190921_G12_660R_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 5653114
                                                                                    II
         Successfully assigned alignments: 3952870 (69.9%)
                                                                                    \prod
## ||
## ||
         Running time : 0.08 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_ATCTCAGG_TCTCTCCG_cDNA190921_A12_660R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 8521752
## ||
         Successfully assigned alignments: 6949056 (81.5%)
                                                                                    II
         Running time : 0.11 minutes
## ||
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_CGAGGCTG_AAGGAGTA_cDNA190921_D8_660R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 917136
## ||
                                                                                    II
         Successfully assigned alignments: 746513 (81.4%)
                                                                                    | |
## ||
         Running time : 0.02 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_CGAGGCTG_ACTGCATA_cDNA190921_E8_660R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 50
                                                                                    II
         Successfully assigned alignments : 2 (4.0%)
                                                                                    П
## ||
## ||
         Running time : 0.00 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_CGAGGCTG_CGTCTAAT_cDNA190921_B8_660R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1968066
                                                                                    II
## ||
         Successfully assigned alignments: 1610383 (81.8%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_CGAGGCTG_CTAAGCCT_cDNA190921_C8_660R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1581514
                                                                                    | |
## ||
         Successfully assigned alignments: 1189525 (75.2%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7048_CGAGGCTG_CTCTCTAT_cDNA190921_H8_637R_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 2299596
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1799872 (78.3%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_CGAGGCTG_GTAAGGAG_cDNA190921_F8_637R_d0_L001 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1162738
                                                                                    II
## ||
         Successfully assigned alignments: 919130 (79.0%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7048 CGAGGCTG TATCCTCT cDNA190921 G8 637R d0 L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 1744412
                                                                                    II
         Successfully assigned alignments : 1354248 (77.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_CGAGGCTG_TCTCTCCCG_cDNA190921_A8_660R_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 2385240
                                                                                    II
         Successfully assigned alignments: 1924411 (80.7%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_CGTACTAG_AAGGAGTA_cDNA190921_D2_543P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 894518
## ||
         Successfully assigned alignments: 705835 (78.9%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_CGTACTAG_ACTGCATA_cDNA190921_E2_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 634964
## ||
                                                                                    II
         Successfully assigned alignments: 482737 (76.0%)
                                                                                    | |
## ||
         Running time : 0.02 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_CGTACTAG_CGTCTAAT_cDNA190921_B2_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1378644
                                                                                    II
         Successfully assigned alignments: 1073791 (77.9%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_CGTACTAG_CTAAGCCT_cDNA190921_C2_543P_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1035600
## ||
                                                                                    11
         Successfully assigned alignments: 731585 (70.6%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_CGTACTAG_CTCTCTAT_cDNA190921_H2_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1263524
                                                                                    | |
## ||
         Successfully assigned alignments: 931988 (73.8%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    П
## || Process BAM file lane7048_CGTACTAG_GTAAGGAG_cDNA190921_F2_543P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 729674
                                                                                    \Pi
## ||
         Successfully assigned alignments : 586754 (80.4%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_CGTACTAG_TATCCTCT_cDNA190921_G2_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1426882
                                                                                    II
## ||
         Successfully assigned alignments: 1074884 (75.3%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7048 CGTACTAG TCTCTCCG cDNA190921 A2 543P d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
## ||
         Total alignments: 1012986
                                                                                    II
         Successfully assigned alignments : 803855 (79.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_CTCTCTAC_AAGGAGTA_cDNA190921_D7_660R_d0_L001 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 1947032
                                                                                    II
         Successfully assigned alignments: 1620477 (83.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_CTCTCTAC_ACTGCATA_cDNA190921_E7_660R_d0_L001 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1775324
## ||
         Successfully assigned alignments: 1462879 (82.4%)
                                                                                   II
## ||
         Running time: 0.03 minutes
                                                                                   II
## ||
                                                                                   II
## || Process BAM file lane7048_CTCTCTAC_CGTCTAAT_cDNA190921_B7_660R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                   | | |
         Total alignments: 2416414
## ||
                                                                                   II
         Successfully assigned alignments: 1832413 (75.8%)
                                                                                   | |
## ||
## ||
         Running time: 0.04 minutes
                                                                                   II
## ||
                                                                                   \Pi
## || Process BAM file lane7048_CTCTCTAC_CTAAGCCT_cDNA190921_C7_660R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
                                                                                   | |
## ||
         Total alignments: 1158944
                                                                                   II
         Successfully assigned alignments: 923343 (79.7%)
                                                                                   П
## ||
## ||
         Running time : 0.04 minutes
                                                                                   II
## ||
## || Process BAM file lane7048_CTCTCTAT_cDNA190921_H7_637R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 2085268
                                                                                   II
## ||
         Successfully assigned alignments: 1623501 (77.9%)
## ||
                                                                                   II
## ||
         Running time : 0.03 minutes
                                                                                   \Pi
                                                                                   II
## || Process BAM file lane7048_CTCTCTAC_GTAAGGAG_cDNA190921_F7_637R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   II
## ||
         Total alignments: 982678
                                                                                   | |
## ||
         Successfully assigned alignments: 789972 (80.4%)
                                                                                   II
         Running time : 0.03 minutes
                                                                                   \prod
## ||
                                                                                   П
## || Process BAM file lane7048_CTCTCTAC_TATCCTCT_cDNA190921_G7_637R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   \Pi
## ||
         Total alignments: 1954346
                                                                                   \Pi
## ||
         Successfully assigned alignments: 1601938 (82.0%)
                                                                                   II
## ||
         Running time : 0.03 minutes
                                                                                   П
## ||
                                                                                   11
## || Process BAM file lane7048_CTCTCTAC_TCTCTCCG_cDNA190921_A7_660R_d0_L001 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                   | | |
## ||
         Total alignments: 562108
                                                                                   II
## ||
         Successfully assigned alignments: 419676 (74.7%)
                                                                                   II
## ||
         Running time : 0.02 minutes
                                                                                   II
## ||
                                                                                   11
## || Process BAM file lane7048 GCTCATGA AAGGAGTA cDNA190921 D11 660R d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                   | |
## ||
## ||
         Total alignments: 3961522
                                                                                   II
         Successfully assigned alignments : 2679404 (67.6%)
## ||
                                                                                   | | |
## ||
         Running time : 0.06 minutes
                                                                                   \Pi
## ||
                                                                                   | |
## || Process BAM file lane7048_GCTCATGA_ACTGCATA_cDNA190921_E11_660R_d42_L0 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                   II
## ||
         Total alignments: 2804452
                                                                                   II
         Successfully assigned alignments: 2259373 (80.6%)
## ||
                                                                                   \Pi
## ||
         Running time : 0.05 minutes
                                                                                   \Pi
## ||
                                                                                   | |
## || Process BAM file lane7048_GCTCATGA_CGTCTAAT_cDNA190921_B11_660R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                   II
```

```
\prod
         Total alignments: 8246846
## ||
         Successfully assigned alignments: 6755823 (81.9%)
                                                                                    II
## ||
         Running time: 0.10 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_GCTCATGA_CTAAGCCT_cDNA190921_C11_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 8812120
## ||
                                                                                    II
         Successfully assigned alignments : 7084243 (80.4%)
                                                                                    | |
## ||
## ||
         Running time: 0.11 minutes
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_GCTCATGA_CTCTCTAT_cDNA190921_H11_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 4749530
                                                                                    II
         Successfully assigned alignments: 3796418 (79.9%)
                                                                                    П
## ||
## ||
         Running time : 0.07 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_GCTCATGA_GTAAGGAG_cDNA190921_F11_660R_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 2389922
                                                                                    II
## ||
         Successfully assigned alignments: 1851794 (77.5%)
## ||
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_GCTCATGA_TATCCTCT_cDNA190921_G11_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 3400756
                                                                                    | |
## ||
         Successfully assigned alignments: 2590235 (76.2%)
                                                                                    II
         Running time : 0.05 minutes
                                                                                    \prod
## ||
                                                                                    \Pi
## || Process BAM file lane7048_GCTCATGA_TCTCTCCG_cDNA190921_A11_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 2942024
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2350177 (79.9%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_GGACTCCT_AAGGAGTA_cDNA190921_D5_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1094970
                                                                                    II
## ||
         Successfully assigned alignments: 902538 (82.4%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048 GGACTCCT ACTGCATA cDNA190921 E5 637R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1074776
## ||
                                                                                    II
         Successfully assigned alignments : 870606 (81.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_GGACTCCT_CGTCTAAT_cDNA190921_B5_637R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments: 1270968
                                                                                    II
         Successfully assigned alignments: 1034493 (81.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_GGACTCCT_CTAAGCCT_cDNA190921_C5_637R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1348484
## ||
         Successfully assigned alignments: 1128899 (83.7%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_GGACTCCT_CTCTCTAT_cDNA190921_H5_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
         Total alignments: 1719740
## ||
                                                                                    II
         Successfully assigned alignments : 1364896 (79.4%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_GGACTCCT_GTAAGGAG_cDNA190921_F5_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 971736
                                                                                    II
         Successfully assigned alignments: 792130 (81.5%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_GGACTCCT_TATCCTCT_cDNA190921_G5_637R_d42_L00 \dots
         WARNING: Paired-end reads were found.
         Total alignments: 1799588
## ||
                                                                                    11
         Successfully assigned alignments: 1493327 (83.0%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_GGACTCCT_TCTCTCCG_cDNA190921_A5_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1508698
                                                                                    | |
## ||
         Successfully assigned alignments: 1187118 (78.7%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
                                                                                    \Pi
## || Process BAM file lane7048_GTAGAGGA_AAGGAGTA_cDNA190921_D10_660R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 2642056
                                                                                    \Pi
## ||
         Successfully assigned alignments: 2190476 (82.9%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_GTAGAGGA_ACTGCATA_cDNA190921_E10_660R_d42 L0 ...
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 2780442
                                                                                    II
## ||
         Successfully assigned alignments: 2322729 (83.5%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7048 GTAGAGGA CGTCTAAT cDNA190921 B10 660R d42 L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 5055874
## ||
                                                                                    II
         Successfully assigned alignments : 3975229 (78.6%)
                                                                                    \prod
## ||
## ||
         Running time : 0.07 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_GTAGAGGA_CTAAGCCT_cDNA190921_C10_660R_d42_L0 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 2949524
                                                                                    II
         Successfully assigned alignments: 2396765 (81.3%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.05 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_GTAGAGGA_CTCTCTAT_cDNA190921_H10_660R_d42_L0 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 3755576
## ||
         Successfully assigned alignments: 3070769 (81.8%)
                                                                                    II
## ||
         Running time: 0.05 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_GTAGAGGA_GTAAGGAG_cDNA190921_F10_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | | |
         Total alignments: 2106986
## ||
                                                                                    II
         Successfully assigned alignments: 1457755 (69.2%)
                                                                                    | |
## ||
         Running time : 0.04 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_GTAGAGGA_TATCCTCT_cDNA190921_G10_660R_d42_L0 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1972554
                                                                                    II
         Successfully assigned alignments: 1536525 (77.9%)
                                                                                    П
## ||
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_GTAGAGGA_TCTCTCCG_cDNA190921_A10_660R_d42_L0 ...
         WARNING: Paired-end reads were found.
         Total alignments : 4648356
                                                                                    II
## ||
         Successfully assigned alignments: 3914432 (84.2%)
## ||
                                                                                    II
## ||
         Running time : 0.06 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_TAAGGCGA_AAGGAGTA_cDNA190921_D1_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 839858
                                                                                    | |
## ||
         Successfully assigned alignments: 636550 (75.8%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \prod
                                                                                    П
## || Process BAM file lane7048_TAAGGCGA_ACTGCATA_cDNA190921_E1_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 876556
                                                                                    \Pi
## ||
         Successfully assigned alignments: 688736 (78.6%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_TAAGGCGA_CGTCTAAT_cDNA190921_B1_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1253302
                                                                                    II
## ||
         Successfully assigned alignments: 987387 (78.8%)
                                                                                    II
## ||
         Running time : 0.04 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7048 TAAGGCGA CTAAGCCT cDNA190921 C1 562K d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1078208
                                                                                    II
## ||
         Successfully assigned alignments : 819281 (76.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_TAAGGCGA_CTCTCTAT_cDNA190921_H1_543P_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1002862
                                                                                    II
         Successfully assigned alignments: 775759 (77.4%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_TAAGGCGA_GTAAGGAG_cDNA190921_F1_543P_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 947296
## ||
         Successfully assigned alignments: 699523 (73.8%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_TAAGGCGA_TATCCTCT_cDNA190921_G1_543P_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 1089442
## ||
                                                                                    II
         Successfully assigned alignments: 812489 (74.6%)
                                                                                    | |
## ||
         Running time : 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_TAAGGCGA_TCTCTCCG_cDNA190921_A1_562K_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 930012
                                                                                    II
         Successfully assigned alignments: 711294 (76.5%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_TAGGCATG_AAGGAGTA_cDNA190921_D6_637R_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments : 1717732
                                                                                    II
## ||
         Successfully assigned alignments: 1404892 (81.8%)
## ||
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_TAGGCATG_ACTGCATA_cDNA190921_E6_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1337948
                                                                                    | |
## ||
         Successfully assigned alignments: 1071646 (80.1%)
                                                                                    II
         Running time : 0.04 minutes
                                                                                    \prod
## ||
                                                                                    П
## || Process BAM file lane7048_TAGGCATG_CGTCTAAT_cDNA190921_B6_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    \Pi
## ||
         Total alignments: 1913998
                                                                                    \Pi
## ||
         Successfully assigned alignments: 1522775 (79.6%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_TAGGCATG_CTAAGCCT_cDNA190921_C6_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1682420
                                                                                    II
## ||
         Successfully assigned alignments: 1353454 (80.4%)
                                                                                    II
## ||
         Running time : 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7048 TAGGCATG CTCTCTAT cDNA190921 H6 637R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 1636314
                                                                                    II
## ||
         Successfully assigned alignments : 1294320 (79.1%)
                                                                                    \prod
## ||
## ||
         Running time : 0.04 minutes
                                                                                    \Pi
## ||
                                                                                    \Pi
## || Process BAM file lane7048_TAGGCATG_GTAAGGAG_cDNA190921_F6_637R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
## ||
         Total alignments : 1038296
                                                                                    II
         Successfully assigned alignments: 851305 (82.0%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_TAGGCATG_TATCCTCT_cDNA190921_G6_637R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
\prod
         Total alignments: 1553372
## ||
         Successfully assigned alignments: 1230705 (79.2%)
                                                                                    II
         Running time: 0.03 minutes
## ||
                                                                                    II
## ||
                                                                                    II
## || Process BAM file lane7048_TAGGCATG_TCTCTCCG_cDNA190921_A6_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
         Total alignments: 2169696
## ||
                                                                                    II
         Successfully assigned alignments: 1783408 (82.2%)
                                                                                    | |
## ||
         Running time : 0.04 minutes
## ||
                                                                                    II
## ||
                                                                                    \Pi
## || Process BAM file lane7048_TCCTGAGC_AAGGAGTA_cDNA190921_D4_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 474162
                                                                                    II
         Successfully assigned alignments: 380540 (80.3%)
                                                                                    П
## ||
## ||
         Running time : 0.02 minutes
                                                                                    II
## ||
## || Process BAM file lane7048_TCCTGAGC_ACTGCATA_cDNA190921_E4_637R_d42_L00 ...
         WARNING: Paired-end reads were found.
         Total alignments: 1113622
                                                                                    II
## ||
         Successfully assigned alignments: 882999 (79.3%)
## ||
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
                                                                                    II
## || Process BAM file lane7048_TCCTGAGC_CGTCTAAT_cDNA190921_B4_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    II
## ||
         Total alignments: 1039872
                                                                                    | |
## ||
         Successfully assigned alignments: 834266 (80.2%)
                                                                                    II
         Running time : 0.03 minutes
                                                                                    \prod
## ||
                                                                                    П
## || Process BAM file lane7048_TCCTGAGC_CTAAGCCT_cDNA190921_C4_637R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments: 961748
                                                                                    \Pi
## ||
         Successfully assigned alignments: 812006 (84.4%)
                                                                                    II
## ||
         Running time : 0.02 minutes
                                                                                    П
## ||
                                                                                    11
## || Process BAM file lane7048_TCCTGAGC_CTCTCTAT_cDNA190921_H4_637R_d42_L00 ... ||
         WARNING: Paired-end reads were found.
## ||
                                                                                    | | |
## ||
         Total alignments: 1084074
                                                                                    II
## ||
         Successfully assigned alignments: 854468 (78.8%)
                                                                                    II
## ||
         Running time: 0.03 minutes
                                                                                    II
## ||
                                                                                    | |
## || Process BAM file lane7048 TCCTGAGC GTAAGGAG cDNA190921 F4 637R d42 L00 ... ||
         WARNING: Paired-end reads were found.
                                                                                    | |
## ||
         Total alignments: 974348
## ||
                                                                                    II
         Successfully assigned alignments : 858930 (88.2%)
                                                                                    \prod
## ||
## ||
         Running time : 0.02 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_TCCTGAGC_TATCCTCT_cDNA190921_G4_637R_d42_L00 ...
         WARNING: Paired-end reads were found.
                                                                                    \Pi
## ||
         Total alignments : 1179980
                                                                                    II
         Successfully assigned alignments: 946285 (80.2%)
## ||
                                                                                    \Pi
## ||
         Running time : 0.03 minutes
                                                                                    \Pi
## ||
                                                                                    | |
## || Process BAM file lane7048_TCCTGAGC_TCTCTCCG_cDNA190921_A4_637R_d42_L00 ... ||
## ||
         WARNING: Paired-end reads were found.
                                                                                    II
```

```
Total alignments: 1007776
                                                                                \Pi
## ||
        Successfully assigned alignments: 814421 (80.8%)
                                                                                II
## ||
        Running time: 0.03 minutes
                                                                                II
                                                                                \Pi
## ||
## || Write the final count table.
                                                                                | |
## || Write the read assignment summary.
                                                                                | |
                                                                                II
## \\-----//
save(counts, file = "data/Rsubread_counts.RData")
sessionInfo()
## R version 3.6.1 (2019-07-05)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: CentOS Linux 7 (Core)
##
## Matrix products: default
          /bi/apps/R/3.6.1/lib64/R/lib/libRblas.so
## LAPACK: /bi/apps/R/3.6.1/lib64/R/lib/libRlapack.so
##
## locale:
                                                                                           LC_MONETARY
##
  [1] LC_CTYPE=en_US.UTF-8 LC_NUMERIC=C
                                                 LC TIME=C
                                                                      LC_COLLATE=C
## [7] LC_PAPER=C
                            LC NAME=C
                                                 LC ADDRESS=C
                                                                      LC_TELEPHONE=C
                                                                                           LC MEASUREM
##
## attached base packages:
## [1] parallel stats4
                                    graphics grDevices utils
                          stats
                                                                  datasets methods
                                                                                      base
##
## other attached packages:
                                                                                           ncdfFlow_2.
## [1] SingleR_1.0.6
                                   ggcyto_1.18.0
                                                               flowWorkspace_3.34.1
## [5] BH_1.72.0-2
                                   RcppArmadillo_0.10.1.2.0
                                                               flowCore_1.52.1
                                                                                           cowplot_1.0
## [9] pals_1.6
                                   MultiAssayExperiment_1.12.1 destiny_3.0.1
                                                                                           edgeR_3.28.
## [13] limma_3.42.0
                                   org.Hs.eg.db_3.10.0
                                                               rtracklayer_1.46.0
                                                                                           ensembldb_2
## [17] AnnotationFilter_1.10.0
                                   GenomicFeatures_1.38.0
                                                               AnnotationDbi 1.48.0
                                                                                           AnnotationH
## [21] BiocFileCache_1.10.2
                                   dbplyr_1.4.2
                                                               Rsubread_2.0.0
                                                                                           knitr_1.26
## [25] ggpubr_0.2.4
                                   magrittr_1.5
                                                               scater_1.14.5
                                                                                           ggplot2_3.3
## [29] scran_1.14.5
                                   SingleCellExperiment_1.8.0
                                                               SummarizedExperiment_1.16.0 DelayedArra
## [33] BiocParallel_1.20.0
                                   matrixStats_0.55.0
                                                               Biobase 2.46.0
                                                                                           GenomicRang
## [37] GenomeInfoDb 1.22.0
                                   IRanges_2.20.1
                                                               S4Vectors 0.24.1
                                                                                           BiocGeneric
## [41] dplyr_1.0.2
## loaded via a namespace (and not attached):
##
    [1] tidyselect_1.1.0
                                      RSQLite_2.1.4
                                                                    grid_3.6.1
                                                                                                  rang
##
     [5] munsell_0.5.0
                                      codetools_0.2-16
                                                                    statmod_1.4.32
                                                                                                  with
##
    [9] colorspace_1.4-1
                                      flowViz_1.48.0
                                                                    rstudioapi_0.10
                                                                                                  robu
##
  [13] ggsignif_0.6.0
                                      vcd_{1.4-4}
                                                                    VIM_4.8.0
                                                                                                  TTR_{-}
## [17] labeling_0.3
                                      GenomeInfoDbData_1.2.2
                                                                    farver_2.0.1
                                                                                                  bit6
## [21] vctrs_0.3.6
                                      generics_0.0.2
                                                                    xfun_0.11
                                                                                                  ggth
## [25] R6_2.4.1
                                      ggbeeswarm_0.6.0
                                                                    rsvd_1.0.2
                                                                                                  Rcpp
## [29] locfit_1.5-9.1
                                      bitops_1.0-6
                                                                    assertthat_0.2.1
                                                                                                  prom
## [33] scales_1.1.0
                                      nnet_7.3-12
                                                                    beeswarm_0.2.3
                                                                                                  gtab
## [37] rlang_0.4.10
                                      scatterplot3d_0.3-41
                                                                    lazyeval_0.2.2
                                                                                                  dich
## [41] hexbin_1.28.0
                                      BiocManager_1.30.10
                                                                    yam1_2.2.0
                                                                                                  abin
```

IDPmisc_1.1.20

proxy_0.4-23

tools_3.6.1

plyr_1.8.5

elli

Rcpp

[45] httpuv_1.5.2

[49] RColorBrewer_1.1-2

##	[53]	progress_1.2.2	zlibbioc_1.32.0	purrr_0.3.3
##		prettyunits_1.0.2	openssl_1.4.1	viridis_0.5.1
##		cluster_2.1.0	haven_2.2.0	data.table_1.12.8
##		openxlsx_4.1.4	lmtest_0.9-37	mvtnorm_1.0-11
##		ProtGenerics_1.18.0	evaluate_0.14	hms_0.5.2
##		xtable_1.8-4	smoother_1.1	XML_3.98-1.20
##		readxl_1.3.1	gridExtra_2.3	compiler_3.6.1
##		tibble_3.0.4	maps_3.3.0	KernSmooth_2.23-15
##		htmltools_0.4.0	pcaPP_1.9-73	later_1.0.0
##		tidyr_1.0.0	RcppParallel_4.4.4	DBI_1.0.0
##		ExperimentHub_1.12.0	MASS_7.3-51.4	rappdirs_0.3.1
##		Matrix_1.2-17	car_3.0-5	igraph_1.2.4.2
##		pkgconfig_2.0.3	GenomicAlignments_1.22.1	foreign_0.8-72
		sp_1.3-2	vipor_0.4.5	dqrng_0.2.1
		stringr_1.4.0	digest_0.6.23	graph_1.64.0
		rmarkdown_2.0	cellranger_1.1.0	uwot_0.1.5
		curl_4.3	shiny_1.4.0	Rsamtools_2.2.1
##	[121]	lifecycle_0.2.0	carData_3.0-3	BiocNeighbors_1.4.1
##	[125]	viridisLite_0.3.0	askpass_1.1	pillar_1.4.7
##	[129]	fastmap_1.0.1	httr_1.4.1	DEoptimR_1.0-8
##	[133]	glue_1.4.2	xts_0.12-0	zip_2.0.4
##	[137]	BiocVersion_3.10.1	bit_1.1-14	class_7.3-15
##	[141]	blob_1.2.0	RcppHNSW_0.2.0	BiocSingular_1.2.0
##	[145]	memoise_1.1.0	irlba_2.3.3	e1071_1.7-3

RCur z00_ RSpe pcaMmime rio_ biom cray rrco form boot forc laek XVec Bios Dela ggpl mapp latt inte Rgra stri latt