

Barcelona Global Health Institute (ISGlobal), Campus PRBB  
Primer importem el diccionari de noms antics i nous:

```
rosetta <- read.table("/home/lucas/ISGlobal/Gen_Referencies/Gene_references_rose
```

Desprs la llista de gens amb mxima diferència segons transcripció:

```
diff_trans <- read.table("/home/lucas/ISGlobal/Llista_diff_10G_12B.txt", fill = "
```

Alguna diferència segons transcripció:

```
diff_trans_all <- read.table("/home/lucas/ISGlobal/Llista_diff_10G_12B_all.txt",
```

Differential peak calling 10G

```
diff_10G_met <- read.table("/home/lucas/ISGlobal/Chip_Seq/DATA/Aligns/q5/Narrow_
```

Differential peak calling 1.2B

```
diff_12B_met <- read.table("/home/lucas/ISGlobal/Chip_Seq/DATA/Aligns/q5/Narrow_
```

Comprovant que tots surten al diccionari

```
table(diff_10G_met[,1] %in% rosetta[,1])

##
## FALSE  TRUE
##      2    31

diff_10G_met[!diff_10G_met[,1] %in% rosetta[,1],1]

## [1] PF3D7_0701100 PF3D7_0800750
## 33 Levels: PF3D7_0100200 PF3D7_0100300 PF3D7_0215300 ... PF3D7_1371900

table(diff_trans[,1] %in% rosetta[,3] | diff_trans[,1] %in% rosetta[,4] | diff_t

##
## TRUE
##    47
```

Tradur tots els gens de "diff<sub>t</sub>rans"

```

for (i in 1:length(diff_trans[,1])){
  if (diff_trans[i,1] %in% rosetta[,3]){
    diff_trans[i,2] <- rosetta[rosetta[,3] %in% diff_trans[i,1],1]
  } else if (diff_trans[i,1] %in% rosetta[,4]){
    diff_trans[i,2] <- rosetta[rosetta[,4] %in% diff_trans[i,1],1]
  } else if (diff_trans[i,1] %in% rosetta[,5]){
    diff_trans[i,2] <- rosetta[rosetta[,5] %in% diff_trans[i,1],1]
  }
}

```

Tradur *diff\_trans* a *ALLERTA!!!* algunstenenmultiplestraduacions!

```

for (i in 1:length(diff_trans_all[,1])){
  if (diff_trans_all[i,1] %in% rosetta[,3]){
    diff_trans_all[i,2] <- rosetta[rosetta[,3] %in% diff_trans_all[i,1],1][1]
  } else if (diff_trans_all[i,1] %in% rosetta[,4]){
    diff_trans_all[i,2] <- rosetta[rosetta[,4] %in% diff_trans_all[i,1],1][1]
  } else if (diff_trans_all[i,1] %in% rosetta[,5]){
    diff_trans_all[i,2] <- rosetta[rosetta[,5] %in% diff_trans_all[i,1],1][1]
  }
}

```

Gens de *diff\_trans* que estan en uno altrallistadelsdifferentialpeakcallings

```

# Taula
table(diff_trans[,2] %in% diff_10G_met[,1] | diff_trans[,2] %in% diff_12B_met[,1])

##
## FALSE TRUE
##    26    21

# Gens que sn a la llista de diff_peaks
diff_trans[diff_trans[,2] %in% diff_10G_met[,1] | diff_trans[,2] %in% diff_12B_met[,1],]

##           V1           V2
## 1  PF07_0048 PF3D7_0711700
## 2  MAL13P1.59 PF3D7_1301500
## 3   PFB0935w PF3D7_0220800

```

```

## 4    PFC0110w PF3D7_0302200
## 5    MAL13P1.2 PF3D7_1300200
## 7    PFA0010c PF3D7_0100200
## 8    PFC0120w PF3D7_0302500
## 9    PFD0090c PF3D7_0402000
## 10   PF11_0011 PF3D7_1100500
## 11   MAL13P1.60 PF3D7_1301600
## 12   MAL13P1.61 PF3D7_1301700
## 14    PFE1615c PF3D7_0532600
## 16   PF11_0009 PF3D7_1100300
## 17   PFD1240w PF3D7_0425900
## 20    PFL1945c PF3D7_1240100
## 22    PFC1115w PF3D7_0324800
## 28   PF13_0005 PF3D7_1300500
## 29    PFI1830c PF3D7_0937800
## 44   MAL8P1.161 PF3D7_0800800
## 45    MAL7P1.43 PF3D7_0711900
## 46   PF11_0007 PF3D7_1100100

```

*# Gens que no sn a la llista de diff\_peaks*

```
diff_trans[!(diff_trans[,2] %in% diff_10G_met[,1] | diff_trans[,2] %in% diff_12
```

```

##          V1          V2
## 6          PF08_0104 PF3D7_0808900
## 13         PFB0974c    PF02_0205
## 15         PF11_0034 PF3D7_1102200
## 18         PFI1465w PF3D7_0930000
## 19         PFL1000c    MAL12P1.199
## 21         PFF1585w PF3D7_0632600
## 23         PFA0020w PF3D7_0100400
## 24         MAL13P1.129 PF3D7_1322900
## 25         PFD1245c PF3D7_0426000
## 26         PFB0310c PF3D7_0207000
## 27         PFF0060w PF3D7_0601200
## 30         MAL13P1.107 PF3D7_1319900
## 31         PF07_0063 PF3D7_0715700
## 32        MAL13_tRNA_Arg1 PF3D7_1341000
## 33         PFD0635c PF3D7_0413100
## 34         PFE0005w PF3D7_0500100
## 35         PF11_0513 PF3D7_1149600

```

```

## 36          PFA0765c  PF3D7_0115700
## 37          PFL0995c   MAL12P1.199
## 38          PFF0390w  PF3D7_0607900
## 39      MAL7_tRNA_His1  PF3D7_0706900
## 40          PFL2665c  PF3D7_1255200
## 41      MAL8P1.160  PF3D7_0800900
## 42          PFL0005w  PF3D7_1200100
## 43      MAL7P1.61  PF3D7_0713300
## 47 PFC10_API0045:tRNA PF3D7_API01100

#### Gens que surten diferencialment metilats que sn a la llista de trans ##

table(diff_10G_met[,1] %in% diff_trans[,2])

##
## FALSE  TRUE
##    19    14

for (i in diff_10G_met[!diff_10G_met[,1] %in% diff_trans[,2],1]){
  print(i)
}

## [1] "PF3D7_0100300"
## [1] "PF3D7_0215300"
## [1] "PF3D7_0300100"
## [1] "PF3D7_0324700"
## [1] "PF3D7_0421700"
## [1] "PF3D7_0601400"
## [1] "PF3D7_0701000"
## [1] "PF3D7_0701100"
## [1] "PF3D7_0711600"
## [1] "PF3D7_0711800"
## [1] "PF3D7_0733000"
## [1] "PF3D7_0800750"
## [1] "PF3D7_0937700"
## [1] "PF3D7_1041300"
## [1] "PF3D7_1240900"
## [1] "PF3D7_1253500"
## [1] "PF3D7_1300600"
## [1] "PF3D7_1301400"
## [1] "PF3D7_1371900"

```

```

table(diff_12B_met[,1] %in% diff_trans[,2])

##
## FALSE  TRUE
##      26      8

for (i in diff_12B_met[!diff_12B_met[,1] %in% diff_trans[,2],1]){
  print(i)
}

## [1] "PF3D7_0115000"
## [1] "PF3D7_0115050"
## [1] "PF3D7_0115100"
## [1] "PF3D7_0215300"
## [1] "PF3D7_0221600"
## [1] "PF3D7_0221650"
## [1] "PF3D7_0223500"
## [1] "PF3D7_0300100"
## [1] "PF3D7_0302100"
## [1] "PF3D7_0401500"
## [1] "PF3D7_0425800"
## [1] "PF3D7_0601100"
## [1] "PF3D7_0601800"
## [1] "PF3D7_0731800"
## [1] "PF3D7_0731900"
## [1] "PF3D7_1039000"
## [1] "PF3D7_1039100"
## [1] "PF3D7_1100400"
## [1] "PF3D7_1100600"
## [1] "PF3D7_1101600"
## [1] "PF3D7_1139000"
## [1] "PF3D7_1139100"
## [1] "PF3D7_1200200"
## [1] "PF3D7_1220700"
## [1] "PF3D7_1240000"
## [1] "PF3D7_1301800"

#### Gens de diff_trans_all que estan en un o altra llista dels differential pe

# Taula
table(diff_trans_all[,2] %in% diff_10G_met[,1] | diff_trans_all[,2] %in% diff_1

```

```
##
## FALSE TRUE
## 5224 43

# Gens que sn a la llista de diff_peaks
diff_trans_all[diff_trans_all[,2] %in% diff_10G_met | diff_trans_all[,2] %in% d

## [1] V1 V2
## <0 rows> (or 0-length row.names)

# Gens que no sn a la llista de diff_peaks
diff_trans_all[!(diff_trans_all[,2] %in% diff_10G_met | diff_trans_all[,2] %in%)

##
##          V1          V2
## 1      PF07_0048 PF3D7_0711700
## 2      MAL13P1.59 PF3D7_1301500
## 3      PFB0935w PF3D7_0220800
## 4      PFC0110w PF3D7_0302200
## 5      MAL13P1.2 PF3D7_1300200
## 6      PF08_0104 PF3D7_0808900
## 7      PFA0010c PF3D7_0100200
## 8      PFC0120w PF3D7_0302500
## 9      PFD0090c PF3D7_0402000
## 10     PF11_0011 PF3D7_1100500
## 11     MAL13P1.60 PF3D7_1301600
## 12     MAL13P1.61 PF3D7_1301700
## 13     PFB0974c   PF02_0205
## 14     PFE1615c PF3D7_0532600
## 15     PF11_0034 PF3D7_1102200
## 16     PF11_0009 PF3D7_1100300
## 17     PFD1240w PF3D7_0425900
## 18     PFI1465w PF3D7_0930000
## 19     PFL1000c   MAL12P1.199
## 20     PFL1945c PF3D7_1240100
## 21     PFF1585w PF3D7_0632600
## 22     PFC1115w PF3D7_0324800
## 23     PFA0020w PF3D7_0100400
## 24     MAL13P1.129 PF3D7_1322900
## 25     PFD1245c PF3D7_0426000
## 26     PFB0310c PF3D7_0207000
```

## 27	PFF0060w	PF3D7_0601200
## 28	PF13_0005	PF3D7_1300500
## 29	PFI1830c	PF3D7_0937800
## 30	MAL13P1.107	PF3D7_1319900
## 31	PF07_0063	PF3D7_0715700
## 32	MAL13_tRNA_Arg1	PF3D7_1341000
## 33	PFD0635c	PF3D7_0413100
## 34	PFE0005w	PF3D7_0500100
## 35	PF11_0513	PF3D7_1149600
## 36	PFA0765c	PF3D7_0115700
## 37	PFL0995c	MAL12P1.199
## 38	PFF0390w	PF3D7_0607900
## 39	MAL7_tRNA_His1	PF3D7_0706900
## 40	PFL2665c	PF3D7_1255200
## 41	MAL8P1.160	PF3D7_0800900
## 42	PFL0005w	PF3D7_1200100
## 43	MAL7P1.61	PF3D7_0713300
## 44	MAL8P1.161	PF3D7_0800800
## 45	MAL7P1.43	PF3D7_0711900
## 46	PF11_0007	PF3D7_1100100
## 47	PFC10_API0045:tRNA	PF3D7_API01100
## 48	PF14_0419	PF3D7_1444100
## 49	PFD0005w	PF3D7_0400100
## 50	PF08_0017	PF3D7_0827200
## 51	PF14_0537	PF3D7_1456400
## 52	PFI0005w	PF3D7_0900100
## 53	PF08_0073	PF3D7_0814600
## 54	PFD1015c	PF3D7_0421300
## 55	PFA0065w	PF3D7_0101300
## 56	PF13_0075	PF3D7_1301800
## 57	PF10_0001	PF3D7_1000100
## 58	PF13_0349	PF3D7_1366500
## 59	PF14_0682	PF3D7_1471500
## 60	PFA0005w	PF3D7_0100100
## 61	MAL13P1.470	PF3D7_1372000
## 62	PFL0935c	PF3D7_1219300
## 63	PF10_0206	PF3D7_1021200
## 64	PFB1055c	PF3D7_0223500
## 65	MAL5_tRNA_Glu1	PF3D7_0527700

## 66	PFF0860c	PF3D7_0617800
## 67	PF14_0337	PF3D7_1435600
## 68	PFC10_API0014	PF3D7_API04500
## 69	PF13_0011	PF3D7_1302100
## 70	PFA0240w	PF3D7_0104700
## 71	PFD1005c	PF3D7_0421100
## 72	PFE0730c	PF3D7_0514600
## 73	PFE0035c	PF3D7_0500700
## 74	PF14_0701	PF3D7_1473300
## 75	PFD0085c	PF3D7_0401900
## 76	MAL7P1.50	PF3D7_0712300
## 77	PF11_0521	PF3D7_1150400
## 78	MAL13P1.58	PF3D7_1301300
## 79	PF11_0468	PF3D7_1145700
## 80	PFD1185w	PF3D7_0424900
## 81	PFD1020c	PF3D7_0421500
## 82	PFD0995c	PF3D7_0420700
## 83	PF14_0189	PF3D7_1419500
## 84	MAL13P1.278	PF3D7_1356800
## 85	PFC10_API0055	<NA>
## 86	PF11_0095	PF3D7_1108200
## 87	PFI0175w-a	<NA>
## 88	PFL1970w	PF3D7_1240900
## 89	PFF0845c	PF3D7_0617400
## 90	PFD0040c	PF3D7_0400900
## 91	PF07_0043	PF3D7_0710600
## 92	PF11_0163	PF3D7_1115500
## 93	PFC10_API0048:tRNA	PF3D7_API00800
## 94	PFI1780w	PF3D7_0936800
## 95	MAL8P1.25	PF3D7_0825800
## 96	PF10_0313a	PF3D7_1031900
## 97	PFF0020c	PF3D7_0600400
## 98	PFB0953w	PF3D7_0221200
## 99	PF11_0486	PF3D7_1147800
## 100	MAL13P1.356	PF3D7_1373500
## 101	PFD0095c	PF3D7_0402100
## 102	PFI0595c	PF3D7_0912200
## 103	PFE0565w	PF3D7_0511400
## 104	PF11_0454	PF3D7_1144000



## 105	PF14_0330	PF3D7_1434900
## 106	PF14_0019	PF3D7_1401700
## 107	PF11_0319	PF3D7_1130900
## 108	PF14_0226	PF3D7_1423500
## 109	PF14_0773	PF3D7_1480100
## 110	PFF0005c	PF3D7_0600100
## 111	PFF0890c	PF3D7_0618400
## 112	MAL13P1.485	PF3D7_1372400
## 113	MAL13P1.214	PF3D7_1343000
## 114	PFC1120c	PF3D7_0324900
## 115	MAL7P1.227	PF3D7_0832000
## 116	PFB0115w	PF3D7_0202400
## 117	MAL13P1.66	PF3D7_1313100
## 118	PF08_0103	PF3D7_0809100
## 119	PF08_0066	PF3D7_0815900
## 120	PFL1770c	PF3D7_1236600
## 121	MAL13P1.84	PF3D7_1316000
## 122	PF08_0030	PF3D7_0824000
## 123	PF10_0009	PF3D7_1000800
## 124	MAL5_tRNA_Phe1	PF3D7_0514400
## 125	PF14_0706	PF3D7_1473700
## 126	MAL7P1.212	PF3D7_0833500
## 127	PFF0855c	PF3D7_0617700
## 128	MAL7P1.187	PF3D7_0733000
## 129	MAL13P1.342	PF3D7_1367900
## 130	PFL1660c	PF3D7_1234400
## 131	PF07_0051	PF3D7_0712600
## 132	PFF0735w	PF3D7_0615200
## 133	PFC10_API0036	<NA>
## 134	PF11_0389	PF3D7_1137700
## 135	PFB0955w	PF3D7_0221400
## 136	MAL7P1.58	PF3D7_0713100
## 137	PF10_0390	PF3D7_1039700
## 138	PF08_0054	PF3D7_0818900
## 139	MAL13P1.23-a_only	<NA>
## 140	PF08_0106	PF3D7_0808700
## 141	PFB0923c	PF3D7_0220300
## 142	PFE1165c	PF3D7_0523300
## 143	PF14_0742	PF3D7_1477100

## 144	PF08_0140	PF3D7_0800300
## 145	PFD0870w	PF3D7_0417900
## 146	PF07_0049	PF3D7_0712000
## 147	PFI0275w	PF3D7_0905600
## 148	MAL7P1.222	PF3D7_0832500
## 149	MAL13_tRNA_Thr1	PF3D7_1355400
## 150	PFI1765c	PF3D7_0936500
## 151	PFI1675w	PF3D7_0934600
## 152	PFB0985c	PF3D7_0222100
## 153	MAL7_tRNA_Ala1	PF3D7_0702700
## 154	PF11_0057	PF3D7_1104600
## 155	PF13_0003	PF3D7_1300300
## 156	PFF1580c	PF3D7_0632500
## 157	MAL13P1.305	PF3D7_1361300
## 158	PFL0030c	PF3D7_1200600
## 159	MAL8P1.80	PF3D7_0816300
## 160	MAL13P1.62	PF3D7_1301900
## 161	PF11_0479	PF3D7_1146800
## 162	PF08_0023	PF3D7_0825900
## 163	PFC0905c	PF3D7_0320400
## 164	PFF0150c	PF3D7_0603100
## 165	MAL13P1.119	PF3D7_1321600
## 166	PFL0650c	PF3D7_1213400
## 167	PFB0405w	PF3D7_0209000
## 168	PF14_0195	PF3D7_1420100
## 169	PFF1390w	PF3D7_0628700
## 170	PFD0340c	PF3D7_0406900
## 171	PFF0470w	<NA>
## 172	MAL13P1.312	PF3D7_1362600
## 173	MAL13P1.475	PF3D7_1372100
## 174	PFF1595c	PF3D7_0632800
## 175	PF08_0041	PF3D7_0821500
## 176	PFA0560c	PF3D7_0111600
## 177	PFC10_API0054:tRNA	PF3D7_API00200
## 178	PF14_0772	PF3D7_1480000
## 179	MAL7P1.225-a	<NA>
## 180	PF14_0351	PF3D7_1437100
## 181	PF14_0667	PF3D7_1469900
## 182	PFD0020c	PF3D7_0400400

## 183	PFI1475w	PF3D7_0930300
## 184	PFA0150c	PF3D7_0103000
## 185	PF10_0355	PF3D7_1036300
## 186	PF14_0135	PF3D7_1413700
## 187	PF14_0684	PF3D7_1471700
## 188	MAL13P1.158	PF3D7_1329900
## 189	MAL13P1.465	PF3D7_1371900
## 190	PF14_0031	PF3D7_1403300
## 191	PFA0615w	PF3D7_0112900
## 192	PF13_0073	PF3D7_1301400
## 193	PF11_0422	PF3D7_1141100
## 194	PFF0510w	PF3D7_0610400
## 195	PF11_0297	PF3D7_1128600
## 196	PFL0655w	PF3D7_1213500
## 197	PF11_0514	PF3D7_1149700
## 198	PF11_0328	PF3D7_1131900
## 199	PFA0370w	PF3D7_0107400
## 200	PFL0945w	PF3D7_1219500
## 201	PFL0715w	PF3D7_1214800
## 202	PFC0176c	PF3D7_0303900
## 203	MAL8P1.45	PF3D7_0822700
## 204	PF14_0708	PF3D7_1474000
## 205	PFC10_API0043	<NA>
## 206	MAL7P1.178	PF3D7_0731800
## 207	PF14_0592	PF3D7_1462200
## 208	MAL13P1.200	PF3D7_1339500
## 209	PFC0045w	PF3D7_0300900
## 210	PFI0705w	PF3D7_0914400
## 211	PF14_0626	PF3D7_1465800
## 212	PFB0910w	PF3D7_0219900
## 213	PF11_0318	PF3D7_1130800
## 214	PF11_0326	PF3D7_1131600
## 215	PF14_0062	PF3D7_1406500
## 216	PFB1035w	PF3D7_0223100
## 217	PF11_0119	PF3D7_1111300
## 218	PF14_0345b	PF3D7_1436500
## 219	PFC10_API0044:tRNA	PF3D7_API01200
## 220	PF11_0222	PF3D7_1121400
## 221	PFI1395w	PF3D7_0928400

## 222	PF14_0527	PF3D7_1455300
## 223	PF07_0138	PF3D7_0732900
## 224	PFE1610w	PF3D7_0532500
## 225	PF10_0027	PF3D7_1002300
## 226	PF10_0365	PF3D7_1037200
## 227	MAL7P1.89	PF3D7_0718000
## 228	PF10_0370	PF3D7_1037700
## 229	PFL1365w	PF3D7_1228200
## 230	PFI0790w	PF3D7_0916100
## 231	PFC10_API0024:tRNA	PF3D7_API03300
## 232	PFE0455w	PF3D7_0509200
## 233	PFE0415w	PF3D7_0508400
## 234	PFD1215w	PF3D7_0425400
## 235	PFC0441c-a	<NA>
## 236	PF07_0107	PF3D7_0726100
## 237	PF10_0270	PF3D7_1027500
## 238	PF08_0107	PF3D7_0808600
## 239	PF08_0105	PF3D7_0808800
## 240	PFF0110w	PF3D7_0602300
## 241	PFE0120c	PF3D7_0502400
## 242	PFL0720w	PF3D7_1214900
## 243	PFC10_API0047:tRNA	PF3D7_API00900
## 244	PFI1585c	PF3D7_0932600
## 245	PF13_0298	PF3D7_1356000
## 246	PFB0225c	PF3D7_0205000
## 247	PF07_0074	PF3D7_0717800
## 248	MAL8P1.72	PF3D7_0817900
## 249	PFB0040c	PF3D7_0200700
## 250	PFC0685w	PF3D7_0315700
## 251	PF11_0080	PF3D7_1106900
## 252	PF11_0520	PF3D7_1150300
## 253	PFB0345c	PF3D7_0207700
## 254	PFA0700c	PF3D7_0114500
## 255	PFI0775w	PF3D7_0915800
## 256	PFD0615c	PF3D7_0412400
## 257	MAL13P1.490	PF3D7_1372500
## 258	PFF1495w	PF3D7_0630800
## 259	PF11_0334	PF3D7_1132500
## 260	MAL8P1.206	PF3D7_0831400

## 261	PFI1445w	PF3D7_0929400
## 262	1399.pre-tRNA-Gly-1	PF3D7_1103200
## 263	PFL2630w	PF3D7_1254500
## 264	PFI0205w	PF3D7_0904200
## 265	PF11_0449	PF3D7_1143600
## 266	PF14_0262	PF3D7_1428400
## 267	MAL13P1.125	PF3D7_1322400
## 268	PF14_0596	PF3D7_1462600
## 269	PF11_0417	PF3D7_1140600
## 270	PF11_0282	PF3D7_1127100
## 271	PFC10_API0018	<NA>
## 272	PF14_0753	PF3D7_1478100
## 273	MAL4_tRNA_Ala1	PF3D7_0411500
## 274	PFI1285w	PF3D7_0926300
## 275	PFL0020w	PF3D7_1200400
## 276	PF14_0166	PF3D7_1416800
## 277	PF14_0735	PF3D7_1476500
## 278	PF11_0088	PF3D7_1107500
## 279	PFL0365c	PF3D7_1207300
## 280	MAL8P1.146	PF3D7_0803200
## 281	MAL7P1.55	PF3D7_0712800
## 282	PFC10_API0040	<NA>
## 283	PFB0960c	PF3D7_0221500
## 284	PF07_0029	PF3D7_0708400
## 285	PF07_0025	PF3D7_0707600
## 286	PFF0265c	PF3D7_0605400
## 287	MAL13P1.177	PF3D7_1335500
## 288	PFL1805c	PF3D7_1237300
## 289	PF10_0406	PF3D7_1041300
## 290	PFA0265c	PF3D7_0105400
## 291	MAL13P1.350	PF3D7_1369300
## 292	PFL0545w	PF3D7_1211000
## 293	PFB0325c	PF3D7_0207300
## 294	PF11_0388	PF3D7_1137600
## 295	MAL13P1.188	PF3D7_1337700
## 296	MAL3_tRNA_Ile1	PF3D7_0312700
## 297	PF13_0016	PF3D7_1303100
## 298	PFE1315w	PF3D7_0526400
## 299	PFC10_API0058:tRNA	PF3D7_API03900

## 300	PFB0615c	PF3D7_0213600
## 301	PF11_0021	PF3D7_1101300
## 302	PFD1175w	PF3D7_0424700
## 303	PFD0855c	PF3D7_0417600
## 304	PF10_0344	PF3D7_1035300
## 305	PFI1815c	PF3D7_0937500
## 306	PFF1195c	PF3D7_0624800
## 307	PFC0495w	PF3D7_0311700
## 308	PF14_0074	PF3D7_1407700
## 309	PF11_0014	PF3D7_1100800
## 310	MAL7P1.105	PF3D7_0720300
## 311	PFD1195c	PF3D7_0425000
## 312	PFA0720w	PF3D7_0114900
## 313	PF10_0109	PF3D7_1011200
## 314	PFA0125c	PF3D7_0102500
## 315	PF07_0116	PF3D7_0727900
## 316	MAL13_tRNA_Cys1	PF3D7_1370100
## 317	PF10_0071	PF3D7_1007200
## 318	PF14_0588	PF3D7_1461800
## 319	PF14_0650	PF3D7_1468200
## 320	PFL1910c	PF3D7_1239400
## 321	PFD1230c	PF3D7_0425700
## 322	PF11_0061	PF3D7_1105000
## 323	PFC10_API0009:tRNA	PF3D7_API05000
## 324	PF08_0006	PF3D7_0829200
## 325	PFE0080c	PF3D7_0501600
## 326	PFF0847w	PF3D7_0617500
## 327	PF10_0155	PF3D7_1015900
## 328	PFE0510c	PF3D7_0510300
## 329	PF11_0196	PF3D7_1118900
## 330	MAL7P1.216	PF3D7_0833100
## 331	PFB0932w	PF3D7_0220700
## 332	PF10_0329	PF3D7_1033800
## 333	PFD0550c	PF3D7_0411100
## 334	PF10_0159	PF3D7_1016300
## 335	MAL8P1.81	PF3D7_0816100
## 336	MAL7P1.144	PF3D7_0726200
## 337	PFE0095c	PF3D7_0501900
## 338	PFI1095w	PF3D7_0922300

## 339	PFF0505c	PF3D7_0610200
## 340	PF14_0080	PF3D7_1408300
## 341	PFF1565c	PF3D7_0632200
## 342	PFL0125c	PF3D7_1202500
## 343	PFL0055c	PF3D7_1201100
## 344	PFD0625c	PF3D7_0412700
## 345	PF14_0624	PF3D7_1465600
## 346	PFC10_API0004:tRNA	PF3D7_API05500
## 347	PF14_0236	PF3D7_1425600
## 348	PF14_0366	PF3D7_1438700
## 349	PFC10_API0007:tRNA	PF3D7_API05200
## 350	PFL0425c	PF3D7_1208500
## 351	PF07_0021	PF3D7_0705100
## 352	PFC10_API0029	<NA>
## 353	MAL13P1.94	PF3D7_1318000
## 354	PF11_0062	PF3D7_1105100
## 355	MAL8P1.216	PF3D7_0700500
## 356	PFE0115c	PF3D7_0502300
## 357	PFI1080w	PF3D7_0922000
## 358	PFB0570w	PF3D7_0212600
## 359	PFC0260w	PF3D7_0305800
## 360	PF10_0356	PF3D7_1036400
## 361	PF08_0141	PF3D7_0800200
## 362	PFF0730c	PF3D7_0615100
## 363	PF13_0226	PF3D7_1341800
## 364	PFD0755c	PF3D7_0415600
## 365	PFA0640c	PF3D7_0113400
## 366	PFI1090w	PF3D7_0922200
## 367	PFD1140w	PF3D7_0424000
## 368	PF14_0497	PF3D7_1452200
## 369	PFA0130c	PF3D7_0102600
## 370	PFF1200w	<NA>
## 371	PF14_0131	PF3D7_1413200
## 372	PF11_0277	PF3D7_1126700
## 373	MAL13P1.480	PF3D7_1372200
## 374	PFF0615c	PF3D7_0612700
## 375	PF10_0056	PF3D7_1005400
## 376	1396.pre-tRNA-Met-1	<NA>
## 377	PF14_0073	PF3D7_1407600

## 378	PFF0975c	PF3D7_0620000
## 379	PF14_0654	PF3D7_1468600
## 380	PF14_0008	PF3D7_1400800
## 381	PF10_0341	PF3D7_1035000
## 382	PFA0740w	PF3D7_0115200
## 383	PF14_0240	PF3D7_1426000
## 384	PF14_0220	PF3D7_1422900
## 385	MAL13_tRNA_Arg3	PF3D7_1370000
## 386	PFA0190c	PF3D7_0103800
## 387	PFD1025w	PF3D7_0421600
## 388	PFF0275c	PF3D7_0605600
## 389	MAL7P1.5	PF3D7_0701600
## 390	PF11_0281	PF3D7_1127000
## 391	PF14_0040	PF3D7_1404300
## 392	PF14_0539	PF3D7_1456600
## 393	PF10_0400	PF3D7_1040700
## 394	MAL13P1.195	PF3D7_1338800
## 395	PF13_0202	PF3D7_1336100
## 396	PF10_0337	PF3D7_1034700
## 397	PF13_0275	PF3D7_1353100
## 398	PFI1020c	PF3D7_0920800
## 399	PFA0200w	PF3D7_0104000
## 400	PF11_0240	PF3D7_1122900
## 401	PF14_0617	PF3D7_1465000
## 402	PFI0105c	PF3D7_0902200
## 403	PF14_0010	PF3D7_1401000
## 404	MAL8P1.162	PF3D7_0800700
## 405	PF13_0300	PF3D7_1356200
## 406	PF08_0122	PF3D7_0804700
## 407	PF13_0269	PF3D7_1351600
## 408	PFD0850c-a	<NA>
## 409	PFF0010w	PF3D7_0600200
## 410	PFF0865w	PF3D7_0617900
## 411	PF10_0377	PF3D7_1038700
## 412	PF11_0482	PF3D7_1147300
## 413	PFD0700c	PF3D7_0414500
## 414	PF08_0142	PF3D7_0800100
## 415	PF10_0395	PF3D7_1040200
## 416	PFE1440c	PF3D7_0528900



## 417	PFL1950w	PF3D7_1240300
## 418	PFL0195w	PF3D7_1204000
## 419	MAL8P1.27	PF3D7_0825200
## 420	PF14_0568	PF3D7_1459500
## 421	PF11_0045	PF3D7_1103500
## 422	PFA0575c	PF3D7_0111900
## 423	PFE1285w	PF3D7_0525800
## 424	PF14_0606	PF3D7_1463800
## 425	PF10_0333	PF3D7_1034300
## 426	PF13_0066	PF3D7_1312000
## 427	PFD0520c	PF3D7_0410500
## 428	PFC0416w	PF3D7_0310000
## 429	PF10_0374	PF3D7_1038400
## 430	PFC10_API0005:tRNA	PF3D7_API05400
## 431	MAL7P1.123	PF3D7_0722900
## 432	PF14_0404	PF3D7_1442600
## 433	PF10_0284	PF3D7_1029100
## 434	PF11_0287	PF3D7_1127600
## 435	PFF0475w	PF3D7_0609600
## 436	PFC0990c	PF3D7_0322200
## 437	PF10_0038	PF3D7_1003500
## 438	PFI1230c	PF3D7_0925100
## 439	PFL1095c	PF3D7_1222800
## 440	PFC0580c	PF3D7_0313900
## 441	PF13_0123	PF3D7_1321000
## 442	PFE0725c	PF3D7_0514500
## 443	PFF0540c	PF3D7_0611000
## 444	MAL13P1.7	PF3D7_1300900
## 445	PFA0750w	PF3D7_0115400
## 446	PFB0110w	PF3D7_0202300
## 447	PFF0450c	PF3D7_0609100
## 448	PF14_0130	PF3D7_1413100
## 449	PF11_0040	PF3D7_1102800
## 450	PFL0905c	PF3D7_1218700
## 451	PFC0215c	PF3D7_0304700
## 452	PFI1770w	PF3D7_0936600
## 453	PFE0040c	PF3D7_0500800
## 454	mal_mito_3	<NA>
## 455	PFB0340c	PF3D7_0207600

## 456	PF11_0155	PF3D7_1114600
## 457	MAL8P1.1	PF3D7_0831100
## 458	PFB0227c	PF3D7_0205100
## 459	PFF0960c	<NA>
## 460	PFC10_API0053:tRNA	PF3D7_API00300
## 461	PF13_0034	PF3D7_1306600
## 462	PFE1515w	PF3D7_0530300
## 463	PFF0235c	PF3D7_0604800
## 464	PFL1975c	PF3D7_1241100
## 465	PFL2080c	PF3D7_1243300
## 466	PF13_0004	PF3D7_1300400
## 467	PFB0732c	PF3D7_0216100
## 468	PFE0070w	PF3D7_0501400
## 469	PFI1805w	PF3D7_0937300
## 470	MAL7_tRNA_Ser1	PF3D7_0714900
## 471	PFD0715c	PF3D7_0414800
## 472	PFE0230w	PF3D7_0504700
## 473	MAL7P1.111	PF3D7_0720900
## 474	MAL8P1.112	PF3D7_0809800
## 475	PF14_0727	PF3D7_1475900
## 476	MAL8P1.205	PF3D7_0831300
## 477	PF11_0431	PF3D7_1141900
## 478	PF10_0072	PF3D7_1007300
## 479	PFF0225w	PF3D7_0604600
## 480	PF10_0229	PF3D7_1023600
## 481	MAL13_tRNA_Gly1	PF3D7_1370200
## 482	PFC0640w	PF3D7_0315200
## 483	MAL13P1.341	PF3D7_1367600
## 484	MAL13P1.268	PF3D7_1352900
## 485	PF14_0034	PF3D7_1403700
## 486	PFL1105c	PF3D7_1223000
## 487	PF07_0104	PF3D7_0724900
## 488	MAL13P1.327	PF3D7_1365100
## 489	PFE0175c	PF3D7_0503600
## 490	PFF0090w	PF3D7_0601900
## 491	PF11_0202	PF3D7_1119500
## 492	PFD1220c	PF3D7_0425500
## 493	PF07_0014	PF3D7_0703800
## 494	PFL0805w	PF3D7_1216700

## 495	PF10_0407	PF3D7_1020800
## 496	MAL13P1.175	PF3D7_1334900
## 497	PF14_0467	PF3D7_1449000
## 498	PF14_0271	PF3D7_1429200
## 499	PFI1455c	PF3D7_0929600
## 500	PFL1555w	PF3D7_1232300
## 501	PFB0886c	PF3D7_0219300
## 502	MAL8P1.219	PF3D7_0700200
## 503	PFI1775w	PF3D7_0936700
## 504	MAL8P1.97	PF3D7_0812900
## 505	PF13_0260	PF3D7_1349700
## 506	PF14_0415	PF3D7_1443700
## 507	PF07_0009	PF3D7_0702600
## 508	PF07_0060	PF3D7_0715100
## 509	PFE1065w	PF3D7_0521200
## 510	PF11_0478	PF3D7_1146700
## 511	PF07_0050	PF3D7_0712400
## 512	MAL8P1.220	PF3D7_0700100
## 513	PFI0210c	PF3D7_0904300
## 514	PF11_0195	PF3D7_1118800
## 515	PFF0245w	PF3D7_0605000
## 516	PFE1095w	PF3D7_0521900
## 517	PFC0070c	PF3D7_0301400
## 518	PF07_0113	PF3D7_0727500
## 519	PF11_0411	PF3D7_1140000
## 520	PFA0660w	PF3D7_0113700
## 521	MAL7P1.220	PF3D7_0832700
## 522	PF11_0307	PF3D7_1129600
## 523	MAL13P1.285	PF3D7_1358000
## 524	PF10_0141	PF3D7_1014400
## 525	PFI0815c	PF3D7_0916600
## 526	PFA0050c	PF3D7_0101000
## 527	PF13_0035	PF3D7_1307100
## 528	PF11_0358	PF3D7_1134700
## 529	PF10_0102	PF3D7_1010500
## 530	PFI1210w	PF3D7_0924600
## 531	MAL4_tRNA_Asn1	PF3D7_0403000
## 532	PFL1670c	PF3D7_1234600
## 533	MAL13P1.130	PF3D7_1323700

## 534	PFB0675w	PF3D7_0214800
## 535	MAL8P1.70	PF3D7_0818100
## 536	PF11_0008	PF3D7_1100200
## 537	PF13_0201	PF3D7_1335900
## 538	PF14_0333	PF3D7_1435200
## 539	PFI1740c-a	<NA>
## 540	PF13_0284	PF3D7_1354100
## 541	MAL8P1.29	PF3D7_0825000
## 542	PFE1205c	PF3D7_0524200
## 543	PF10_0080	PF3D7_1008200
## 544	PF14_0388	PF3D7_1440900
## 545	PFL2550w	PF3D7_1253000
## 546	PF14_0138	PF3D7_1414000
## 547	PFL0415w	PF3D7_1208300
## 548	PF14_0067	PF3D7_1407000
## 549	PFF1275c	PF3D7_0626300
## 550	PF10_0291	PF3D7_1029800
## 551	MAL5_ITS1	<NA>
## 552	PFF0710w	PF3D7_0614700
## 553	PF13_0220	PF3D7_1340400
## 554	PF13_0012	PF3D7_1302200
## 555	PF11_0344	PF3D7_1133400
## 556	PFF0190c	PF3D7_0603900
## 557	PF14_0521	PF3D7_1454800
## 558	PFL0395c	PF3D7_1207900
## 559	PF11_0056	PF3D7_1104500
## 560	PF10_0101	PF3D7_1010400
## 561	PF14_0165	PF3D7_1416600
## 562	PF13_0128	PF3D7_1323000
## 563	MAL8P1.28	PF3D7_0825100
## 564	PF13_0100	PF3D7_1318200
## 565	PFF1170w	PF3D7_0624300
## 566	PF10_0137	PF3D7_1014000
## 567	PFC0241w	PF3D7_0305400
## 568	PFB0125c	PF3D7_0202600
## 569	PF11_0064	PF3D7_1105300
## 570	PFD0655w	PF3D7_0413400
## 571	PF11_0220	PF3D7_1121300
## 572	PFD0367w	PF3D7_0407500

## 573	PF08_0060	PF3D7_0817300
## 574	PF14_0644	PF3D7_1467600
## 575	PFA0760w	PF3D7_0115600
## 576	PF10_0267	PF3D7_1027200
## 577	PFF0280w	PF3D7_0605700
## 578	PF14_0180	PF3D7_1418200
## 579	PFC0680w	PF3D7_0315600
## 580	PF11_0426	PF3D7_1141500
## 581	PFB0590w	PF3D7_0213000
## 582	PF14_0725	PF3D7_1475700
## 583	MAL1_ITS2	<NA>
## 584	PF10_0112	PF3D7_1011500
## 585	PFD0080c	PF3D7_0401800
## 586	PFC0815c	PF3D7_0318400
## 587	PFD0195c	PF3D7_0404000
## 588	PFF0175c	PF3D7_0603600
## 589	MAL8P1.6	PF3D7_0829600
## 590	PF14_0458	PF3D7_1448200
## 591	PFE0670w	PF3D7_0513500
## 592	MAL7P1.176	PF3D7_0731500
## 593	PFL0115w	PF3D7_1202300
## 594	PF11_0421	PF3D7_1141000
## 595	MAL13P1.252	PF3D7_1350000
## 596	PFB0650w	PF3D7_0214300
## 597	MAL13P1.30	PF3D7_1306100
## 598	PF11_0435	PF3D7_1142300
## 599	PFC0315c	PF3D7_0307500
## 600	PF07_0005	PF3D7_0702200
## 601	PFI0265c	PF3D7_0905400
## 602	PFC10_API0023:tRNA	PF3D7_API03400
## 603	PFL0550w	PF3D7_1211100
## 604	PF10_0396	PF3D7_1040300
## 605	MAL5_18S	<NA>
## 606	PF13_0319	PF3D7_1360400
## 607	MAL13P1.224	PF3D7_1345000
## 608	MAL13P1.301	PF3D7_1360500
## 609	PF14_0761	PF3D7_1479000
## 610	PF08_0082	PF3D7_0813100
## 611	PFL0080c	PF3D7_1201600

## 612	PF13_0193	PF3D7_1334600
## 613	PFL2545c	PF3D7_1252900
## 614	PFB0926c	PF3D7_0220500
## 615	PF14_0371	PF3D7_1439200
## 616	PF11_0503	PF3D7_1148700
## 617	PF14_0508	PF3D7_1453500
## 618	MAL8P1.60	PF3D7_0819800
## 619	PFC10_API0038	<NA>
## 620	MAL13P1.14	PF3D7_1302700
## 621	PFI1760w	PF3D7_0936400
## 622	PFL0420w	PF3D7_1208400
## 623	PFL1960w	PF3D7_1240600
## 624	PF11_0515	PF3D7_1149800
## 625	PFL1055c	PF3D7_1221900
## 626	PF11_0342	PF3D7_1133200
## 627	MAL13P1.33	PF3D7_1306700
## 628	PF11_0357	PF3D7_1134600
## 629	PF14_0397	PF3D7_1441800
## 630	PFE0330w	PF3D7_0506700
## 631	PFB0423c	PF3D7_0209400
## 632	PF11_0038	PF3D7_1102600
## 633	PF14_0664	PF3D7_1469600
## 634	PFI0115c	PF3D7_0902400
## 635	PF11_0251	PF3D7_1124000
## 636	PFL2190c	PF3D7_1245600
## 637	PFE1325w	PF3D7_0526600
## 638	PFC10_API0041	<NA>
## 639	PFI0185w	PF3D7_0903800
## 640	PFL1415w	PF3D7_1229300
## 641	PF07_0089	PF3D7_0721700
## 642	PFC0840w	PF3D7_0319000
## 643	PF14_0017	PF3D7_1401500
## 644	PFC0635c	PF3D7_0315100
## 645	PF11_0320	PF3D7_1131000
## 646	PFI1035w	PF3D7_0921100
## 647	PFC0610c	PF3D7_0314700
## 648	PDF0495c	PF3D7_0410000
## 649	PF13_0185	PF3D7_1333700
## 650	PFC0701w	PF3D7_0316100

## 651	PF14_0536	PF3D7_1456300
## 652	PF10_0234	PF3D7_1024100
## 653	PF11_0129	PF3D7_1112300
## 654	MAL13P1.248	PF3D7_1349100
## 655	PFA0415c	PF3D7_0108400
## 656	PFI1665w	PF3D7_0934400
## 657	PFC0645w	<NA>
## 658	PF14_0629	PF3D7_1466000
## 659	PFD0980w	PF3D7_0420200
## 660	PFL0740c	PF3D7_1215300
## 661	PFA0345w-a	<NA>
## 662	PFD0665c	PF3D7_0413600
## 663	PFE0955w	PF3D7_0519000
## 664	PFL2505c	PF3D7_1252100
## 665	MAL7P1.162	PF3D7_0729900
## 666	PFE0475w	PF3D7_0509600
## 667	PFD0225w	<NA>
## 668	PFI0460w	PF3D7_0909500
## 669	PF14_0346	PF3D7_1436600
## 670	PFL0915c	<NA>
## 671	PF10_0193	PF3D7_1019900
## 672	PF14_0281	PF3D7_1430200
## 673	PFC0065c	PF3D7_0301300
## 674	PF14_0752	PF3D7_1478000
## 675	PFC10_API0039	<NA>
## 676	PFF1405c	PF3D7_0629000
## 677	PF10_0020	PF3D7_1001600
## 678	PF14_0286	PF3D7_1430700
## 679	PFL0345w	PF3D7_1206900
## 680	PF14_0502	PF3D7_1452700
## 681	PFF1470c	PF3D7_0630300
## 682	PFB0930w	PF3D7_0220600
## 683	PFD0200c	PF3D7_0404100
## 684	MAL8P1.138	PF3D7_0805000
## 685	PFE1115c	PF3D7_0522300
## 686	MAL8P1.137	PF3D7_0805100
## 687	PFI0995w	PF3D7_0920300
## 688	MAL7P1.6	PF3D7_0702000
## 689	PF13_0024	PF3D7_1305000

## 690	PF14_0025	PF3D7_1402300
## 691	PFF1230c	PF3D7_0625400
## 692	PF10_0315	PF3D7_1032300
## 693	PF11_0394	PF3D7_1138200
## 694	PFL1040w	PF3D7_1221600
## 695	PF07_0068	PF3D7_0716600
## 696	PFI0215c	PF3D7_0904400
## 697	PFD1135c	PF3D7_0423900
## 698	PF11_0460	PF3D7_1144800
## 699	MAL13P1.212	PF3D7_1342500
## 700	PF10_0250	PF3D7_1025500
## 701	PFL1445w	PF3D7_1230000
## 702	PFF0455w	PF3D7_0609200
## 703	PF10_0092	PF3D7_1009500
## 704	PF14_0579	PF3D7_1460700
## 705	PF11_0406	PF3D7_1139600
## 706	PFI0050c	PF3D7_0901000
## 707	PF10_0002	PF3D7_1000200
## 708	PF14_0361	PF3D7_1438100
## 709	PFF0185c	<NA>
## 710	MAL7P1.59	PF3D7_0713200
## 711	PFB1045w	PF3D7_0223300
## 712	PF11_0117	PF3D7_1111100
## 713	MAL7P1.142	<NA>
## 714	PF13_0107	PF3D7_1319200
## 715	PFD1105w	PF3D7_0423400
## 716	PF10_0346	PF3D7_1035500
## 717	PF14_0395	PF3D7_1441600
## 718	PFI0315c	PF3D7_0906400
## 719	PFC0485w	PF3D7_0311400
## 720	MAL13P1.65	<NA>
## 721	PFL1250c	PF3D7_1225900
## 722	PF14_0721	PF3D7_1475300
## 723	PF14_0435	PF3D7_1445800
## 724	MAL8P1.157	PF3D7_0801700
## 725	PFI1320c	PF3D7_0926900
## 726	PF10_0019	PF3D7_1001500
## 727	PFE1625c	<NA>
## 728	PF13_0211	PF3D7_1337800



## 729	PFA0625w	PF3D7_0113100
## 730	PF14_0374	PF3D7_1439500
## 731	PF13_0127	PF3D7_1322600
## 732	PFD0270c	PF3D7_0405500
## 733	PFF0585c	PF3D7_0612000
## 734	MAL7P1.218	PF3D7_0832900
## 735	PF14_0044	PF3D7_1404700
## 736	PF10_0184	PF3D7_1019100
## 737	PFC0105w	PF3D7_0302100
## 738	PF11_0480	PF3D7_1147000
## 739	PF07_0061	PF3D7_0715200
## 740	PFB0946c	PF3D7_0220900
## 741	MAL13P1.413	PF3D7_1370300
## 742	PFI0880c	PF3D7_0918000
## 743	PFE0610c	PF3D7_0512300
## 744	PF14_0452	PF3D7_1447500
## 745	PF14_0747	PF3D7_1477600
## 746	PF13_0270	PF3D7_1351800
## 747	MAL7P1.159	PF3D7_0729200
## 748	PFL0360c	PF3D7_1207200
## 749	PF07_0103	PF3D7_0724400
## 750	PF10_0119	PF3D7_1012200
## 751	PFL1360c	PF3D7_1228100
## 752	PF11_0288	PF3D7_1127700
## 753	PF11_0505	PF3D7_1148900
## 754	PFI0535w	PF3D7_0911000
## 755	PF08_0088	PF3D7_0812300
## 756	PF11_0371	PF3D7_1136000
## 757	PF14_0321	PF3D7_1434000
## 758	PFF0035c	PF3D7_0600700
## 759	PF14_0032	PF3D7_1403400
## 760	PF11_0039	PF3D7_1102700
## 761	PF10_0196	PF3D7_1020300
## 762	PFL0690c	PF3D7_1214200
## 763	PF11_0311	PF3D7_1130000
## 764	MAL7P1.29	PF3D7_0709900
## 765	PFE1190c	PF3D7_0523900
## 766	PFL2460w	PF3D7_1251200
## 767	PF11_0160	PF3D7_1115200

```

## 768          PFE1500c PF3D7_0530000
## 769          PF10_0061 PF3D7_1006000
## 770          MAL7P1.98 PF3D7_0719000
## 771          PFC10_API0012          <NA>
## 772          MAL7P1.35 PF3D7_0711200
## 773          PF11_0339 PF3D7_1132900
## 774          MAL7P1.170 PF3D7_0730800
## 775          PFE1050w PF3D7_0520900
## 776          PFB0190c PF3D7_0204100
## 777          PF14_0681 PF3D7_1471400
## 778          PFL2040w PF3D7_1242400
## 779          PFL0015c PF3D7_1200300
## 780          PFD0140w PF3D7_0402800
## 781          MAL13P1.166 PF3D7_1331100
## 782          PF13_0316 PF3D7_1358800
## 783          PFB0100c PF3D7_0202000
## 784          PF10_0230 PF3D7_1023700
## 785          PFI1450c PF3D7_0929500
## 786          PFI1110w PF3D7_0922600
## 787          PF11_0147 PF3D7_1113900
## 788          MAL8P1.7 PF3D7_0829500
## 789          PF11_0402 PF3D7_1139100
## 790          PF10_0015 PF3D7_1001100
## 791          PF11_0174 PF3D7_1116700
## 792          PF14_0168 PF3D7_1417000
## 793          PF14_0564 PF3D7_1459100
## 794          PFL2255w PF3D7_1247000
## 795          PFE0355c PF3D7_0507200

```

## 1 Session Info

```
sessionInfo()
```

```

## R version 3.3.3 (2017-03-06)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Ubuntu 16.04.2 LTS
##
## locale:
##  [1] LC_CTYPE=en_US.UTF-8      LC_NUMERIC=C
##  [3] LC_TIME=es_ES.UTF-8      LC_COLLATE=en_US.UTF-8
##  [5] LC_MONETARY=es_ES.UTF-8  LC_MESSAGES=en_US.UTF-8
##  [7] LC_PAPER=es_ES.UTF-8     LC_NAME=C
##  [9] LC_ADDRESS=C             LC_TELEPHONE=C

```

```

## 808          PF14_0418 PF3D7_1444000
## 809          PFI1050c PF3D7_0921400
## 810          PF10_0348 PF3D7_1035700
## 811          PF07_0098 PF3D7_0723500
## 812          PFL1730c PF3D7_1235800
## 813          PFB0250w PF3D7_0205600
## 814          PF14_0335 PF3D7_1435400
## 815          PFL2615w PF3D7_1254200
## 816          MAL13P1.110 PF3D7_1359500

```

```
## [11] LC_MEASUREMENT=es_ES.UTF-8 LC_IDENTIFICATION=C
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods    base
##
## other attached packages:
## [1] knitr_1.16
##
## loaded via a namespace (and not attached):
## [1] magrittr_1.5  tools_3.3.3  stringi_1.1.5 highr_0.6      stringr_1.2.0
## [6] evaluate_0.10
```