Using the PACViR Pipeline

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1 Introduction

The PACViR pipeline generates a visualization of a plastome in a circular fashion. This vignette provides two examples of how to execute PACViR via the R function 'PACViR.complete()' and via bash.

2 Requirements

To execute PACViR several requirements have to be installed.

```
> #library(PACViR)
>
```

3 PACViR via R-function

PACViR can be easily executed via the PACViR.complete() function in R. Therefore one can load the provided data from the package.

```
# The absolute path to the input directory is set

inPath <- system.file("extdata", "MH161174/", package="PACViR")

# The names of the input files located in inPath are set

inFile_gb <- "MH161174.gb"

inFile_bam <- "MH161174.bam"

gbk.file <- paste(inPath,"/",inFile_gb)

bam.file <- paste(inPath,"/",inFile_bam)

windowSize <- 250

mosdepthCmd <- "mosdepth"

threshold <- 15

# The absolute path to the input directory is set

median in Path are set

inPath are set

inFile_bam <- "MH161174.bam"

publication

mosdepthCmd <- paste(inPath,"/",inFile_bam)

threshold <- 15

# The absolute path to the input directory is set

median inPath are set

inPath are set

inFile_gb <- "MH161174.bam"

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most package = "PACViR")

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inFile_gb <- "MH161174.bam"

# The names of the input files loca
```

```
> delete <- "TRUE"
> outDir <- "./output"
> #PACViR.complete(gbk.file, bam.file, windowSize, mosdepthCmd, threshold, delete, outDir)
```

4 PACViR via command line

Execute PACViR_Rscript.R via command line with Rscript.

```
Rscript PACViR_Rscript.R -k ../inst/extdata/DAS01.gb -b ../inst/extdata/DAS01.bam
```

5 Modifying parameters

Depending on which system PACViR will be executed

6 More Information

7 sessionInfo

```
> sessionInfo()
```

```
R version 3.3.3 (2017-03-06)
```

Platform: x86_64-pc-linux-gnu (64-bit)
Running under: Debian GNU/Linux 9 (stretch)

locale:

```
[1] LC_CTYPE=de_DE.UTF-8 LC_NUMERIC=C
```

[3] LC_TIME=de_DE.UTF-8 LC_COLLATE=de_DE.UTF-8
[5] LC_MONETARY=de_DE.UTF-8 LC_MESSAGES=de_DE.UTF-8

[7] LC_PAPER=de_DE.UTF-8 LC_NAME=C
[9] LC_ADDRESS=C LC_TELEPHONE=C

[11] LC_MEASUREMENT=de_DE.UTF-8 LC_IDENTIFICATION=C

attached base packages:

```
[1] stats graphics grDevices utils datasets
```

[6] methods base

loaded via a namespace (and not attached):

[1] tools_3.3.3