## Package 'MMAPPR2data'

October 12, 2023

Title Sample Data for MMAPPR2 Version 1.14.0 Description Contains data for illustration purposes in the MMAPPR2 package, namely simulated BAM files containing RNA-Seq data for a mutation in the slc24a5 gene, taken from the GRCz11 genome. Also contains reference sequence and annotation files for the region. **Depends** R (>= 3.6.0) VignetteBuilder knitr **Enhances MMAPPR2** Suggests knitr, rmarkdown, BiocStyle, roxygen2, seqinr, readr Imports Rsamtools License GPL-3 **Encoding** UTF-8 biocViews RNASeqData, Danio\_rerio\_Data, SequencingData, Genome URL https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3613585/, https://github.com/kjohnsen/MMAPPR2 RoxygenNote 6.1.1 git\_url https://git.bioconductor.org/packages/MMAPPR2data git\_branch RELEASE\_3\_17 git\_last\_commit d0e66ff git\_last\_commit\_date 2023-04-25 Date/Publication 2023-10-12 Author Kyle Johnsen [aut], Jonathon Hill [cre] Maintainer Jonathon Hill <jhill@byu.edu>

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MMAPPR2data

#### Description

Contains BAM files and indices for example use in MMAPPR2. The data is artificial, meant to simulate sequencing of the zebrafish slc24a5 gene in mutant and wild-type pools resulting from the cross of a novel mutant from a forward genetics screen with a wild-type line, as described in Hill et al. 2013.

#### Usage

```
exampleMutBam()
exampleWTbam()
goldenFasta()
goldenGFF()
```

#### Details

Besides BAM files and indices, the package also contains fasta and gtf files for just the region of the slc24a5 gene, which are also used in demonstrating MMAPPR2's functionality. They are based on the GRCz11 assembly and were obtained from Ensembl version 95.

#### Value

A BamFile object referencing a BAM file and its index.

A BamFile object referencing a BAM file and its index.

A path to the bgzipped slc24a5 fasta file

The path to the bgzipped GFF file

#### Functions

- exampleMutBam: Easy access to example mutant pool BAM file.
- exampleWTbam: Easy access to example wild-type pool BAM file.
- goldenFasta: Easy access to example fasta file for slc24a5 gene.
- goldenGFF: Easy access to example GFF file for slc24a5 gene.

#### Examples

```
mutFile <- exampleMutBam()
wtFile <- exampleWTbam()
goldenFasta <- goldenFasta()
goldenGFF()</pre>
```

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