

Package ‘LungCancerLines’

November 10, 2019

Type Package

Title Reads from Two Lung Cancer Cell Lines

Version 0.24.0

Author Cory Barr, Michael Lawrence

Maintainer Cory Barr <barr.cory@gene.com>

Imports Rsamtools

Description Reads from an RNA-seq experiment between two lung cancer cell lines: H1993 (met) and H2073 (primary).
The reads are stored as Fastq files and are meant for use with the TP53Genome object in the gmapR package.

License Artistic-2.0

biocViews ExperimentData, Genome, CancerData, LungCancerData, RNASeqData

git_url <https://git.bioconductor.org/packages/LungCancerLines>

git_branch RELEASE_3_10

git_last_commit 40e1eb8

git_last_commit_date 2019-10-29

Date/Publication 2019-11-10

R topics documented:

TP53Genome-package	1
LungCancerBamFiles	2
LungCancerFastqFiles	3

Index	4
--------------	----------

TP53Genome-package	<i>Genomic Sequence of the TP53 Gene Plus a 1-Megabase Region on Each Side of the Gene</i>
--------------------	--

Description

This package was created to use in examples and test sets for the gmapR and VariationTools packages.

Details

Package: TP53Genome
Type: Package
Version: 1.0
Date: 2012-09-05
License: Artistic-2.0

By calling `data(p53Genome)`, users will have access to a `GmapGenome` object for the TP53 genome.

Author(s)

Cory Barr

Maintainer: Cory Barr <barr.cory@gene.com>

Examples

```
data(p53Genome)
```

LungCancerBamFiles *Get the BAM paths*

Description

Gets a `BamFileList` pointing to BAM files containing read alignments for the H1993 and H2073 RNA-seq samples. The files are the “analyzed” BAM files as output by the HTSeqGenie package.

Usage

```
LungCancerBamFiles()
```

Details

The reads were aligned to genome [TP53Genome](#), using the following parameters:

- `splicing`: `knownGene`
- `novelsplicing`: 1
- `indel_penalty`: 1
- `distant_splice_penalty`: 1
- `suboptimal_levels`: 2
- `npaths`: 10

Note that the BAM files contain only unique alignments.

Value

A `BamFileList` pointing to two BAM files, one for H1993, one for H2073.

Author(s)

Michael Lawrence

Examples

LungCancerBamFiles()

LungCancerFastqFiles *Get the Fastq paths*

Description

Returns a character vector of file paths to the demo Fastq files.

Usage

LungCancerFastqFiles()

Value

A character vector, named according to “H[1993/2073].[first/last]”.

Author(s)

Michael Lawrence

Examples

LungCancerFastqFiles()

Index

LungCancerBamFiles, [2](#)

LungCancerFastqFiles, [3](#)

TP53Genome, [2](#)

TP53Genome (TP53Genome-package), [1](#)

TP53Genome-package, [1](#)