

Package ‘WGSmapp’

January 7, 2025

Type Package

Title Mappability tracks of Whole-genome Sequencing from the ENCODE Project

Version 1.19.0

Author Rujin Wang

Maintainer Rujin Wang <rujin@email.unc.edu>

Description

This package provides whole-genome mappability tracks on human hg19/hg38 assembly. We employed the 100-mers mappability track from the ENCODE Project and computed weighted average of the mappability scores if multiple ENCODE regions overlap with the same bin. “Black-list” bins, including segmental duplication regions and gaps in reference assembly from telomere, centromere, and/or heterochromatin regions are included. The dataset consists of three assembled .bam files of single-cell whole genome sequencing from 10X for illustration purposes.

Depends R (>= 3.6.0), GenomicRanges

License GPL-2

biocViews ExperimentData, SequencingData, DNaseqData, SingleCellData, Homo_sapiens_Data, Genome, ENCODE

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

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

git_branch devel

git_last_commit 4daaa9f

git_last_commit_date 2024-10-29

Repository Bioconductor 3.21

Date/Publication 2025-01-07

Contents

mapp_hg19	2
mapp_hg38	2

Index**3**

`mapp_hg19`*GRanges with mappability scores for hg19*

Description

GRanges of mappability track for 100-mers on the GRCh37/hg19 human reference genome from ENCODE.

Usage`mapp_hg19`**Format**

A GRanges object with 21591667 ranges and mappability scores

`mapp_hg38`*GRanges with mappability scores for hg38*

Description

Use liftOver utility to convert hg19 coordinates to hg38

Usage`mapp_hg38`**Format**

A GRanges object with 21584930 ranges and mappability scores

Index

* datasets

mapp_hg19, [2](#)

mapp_hg38, [2](#)

mapp_hg19, [2](#)

mapp_hg38, [2](#)