

# Package ‘WGSmapp’

April 17, 2025

**Type** Package  
**Title** Mappability tracks of Whole-genome Sequencing from the ENCODE Project  
**Version** 1.21.0  
**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** 6021e59  
**git\_last\_commit\_date** 2025-04-15  
**Repository** Bioconductor 3.22  
**Date/Publication** 2025-04-17

## 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](#)