

Resource Summary Report

Generated by [SPARC SAWG](#) on Sep 17, 2026

RSVSim

RRID:SCR_001777

Type: Tool

Proper Citation

RSVSim (RRID:SCR_001777)

Resource Information

URL: <http://www.bioconductor.org/packages/release/bioc/html/RSVSim.html>

Proper Citation: RSVSim (RRID:SCR_001777)

Description: A software package for the simulation of deletions, insertions, inversions, tandem duplications and translocations of various sizes in any genome available as FASTA-file or data package in R. SV breakpoints can be placed uniformly accross the whole genome, with a bias towards repeat regions and regions of high homology (for hg19) or at user-supplied coordinates.

Synonyms: RSVSim: an R/Bioconductor package for the simulation of structural variations

Resource Type: software resource

Defining Citation: [PMID:23620362](#)

Keywords: unix/linux, mac os x, windows, r, sequencing, structural variation

Availability: Free, Available for download, Freely available

Resource Name: RSVSim

Resource ID: SCR_001777

Alternate IDs: OMICS_03822

License: GNU Lesser General Public License, v3

Record Creation Time: 20220129T080209+0000

Record Last Update: 20260912T195531+0000

Ratings and Alerts

No rating or validation information has been found for RSVSim.

No alerts have been found for RSVSim.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 16 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#).

Hu M, et al. (2025) Benchmarking, detection, and genotyping of structural variants in a population of whole-genome assemblies using the SVGAP pipeline. bioRxiv : the preprint server for biology.

Hu M, et al. (2025) Accurate, Scalable Structural Variant Genotyping in Complex Genomes at Population Scales. Molecular biology and evolution, 42(8).

Xu J, et al. (2023) A comprehensive analysis of copy number variations in diverse apple populations. BMC genomics, 24(1), 256.

Jung YH, et al. (2023) Characterization of a strain-specific CD-1 reference genome reveals potential inter- and intra-strain functional variability. BMC genomics, 24(1), 437.

Wolujewicz P, et al. (2021) Genome-wide investigation identifies a rare copy-number variant burden associated with human spina bifida. Genetics in medicine : official journal of the American College of Medical Genetics, 23(7), 1211.

Wei L, et al. (2021) SimFFPE and FilterFFPE: improving structural variant calling in FFPE samples. GigaScience, 10(9).

Lisiecka A, et al. (2021) Linearization of genome sequence graphs revisited. iScience, 24(7), 102755.

Smolander J, et al. (2021) Evaluation of tools for identifying large copy number variations from ultra-low-coverage whole-genome sequencing data. BMC genomics, 22(1), 357.

Tham CY, et al. (2020) NanoVar: accurate characterization of patients' genomic structural variants using low-depth nanopore sequencing. Genome biology, 21(1), 56.

Wang TY, et al. (2020) ScanITD: Detecting internal tandem duplication with robust variant allele frequency estimation. GigaScience, 9(8).

Zhou A, et al. (2019) Evaluating nanopore sequencing data processing pipelines for structural variation identification. Genome biology, 20(1), 237.

Chen L, et al. (2017) Detection and validation of structural variations in bovine whole-genome sequence data. *Genetics, selection, evolution : GSE*, 49(1), 13.

Alhakami H, et al. (2017) A comparative evaluation of genome assembly reconciliation tools. *Genome biology*, 18(1), 93.

Camiolo S, et al. (2016) Altools: a user friendly NGS data analyser. *Biology direct*, 11(1), 8.

Stuart T, et al. (2016) Population scale mapping of transposable element diversity reveals links to gene regulation and epigenomic variation. *eLife*, 5.

Lim JQ, et al. (2015) BatAlign: an incremental method for accurate alignment of sequencing reads. *Nucleic acids research*, 43(16), e107.