

Resource Summary Report

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GSNAP

RRID:SCR_005483

Type: Tool

Proper Citation

GSNAP (RRID:SCR_005483)

Resource Information

URL: <http://research-pub.gene.com/gmap/>

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Description: Software to align single and paired end reads as short as 14 nt and of arbitrarily long length. Can detect short and long distance splicing, including interchromosomal splicing, in individual reads, using probabilistic models or database of known splice sites. Permits SNP-tolerant alignment to reference space of all possible combinations of major and minor alleles, and can align reads from bisulfite-treated DNA for study of methylation state.

Abbreviations: GSNAP

Synonyms: Genomic Short-read Nucleotide Alignment Program

Resource Type: alignment software, data processing software, image analysis software, software application, software resource

Defining Citation: [PMID:20147302](#)

Keywords: next-generation sequencing, bio.tools, FASEB list

Resource Name: GSNAP

Resource ID: SCR_005483

Alternate IDs: OMICS_00665, biotools:gsnap

Alternate URLs: <https://bio.tools/gsnap>

Record Creation Time: 20220129T080230+0000

Record Last Update: 20260912T200011+0000

Ratings and Alerts

No rating or validation information has been found for GSNAP.

No alerts have been found for GSNAP.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 802 mentions in open access literature.

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

Koh J, et al. (2026) ZNF395 Is a Hypoxia-Responsive Regulator of Mitochondrial Glutaminolysis in Clear Cell Renal Cell Carcinoma. *Cancer research*, 86(7), 1676.

Chen J, et al. (2026) G9a-mediated H3K9me2 orchestrates intestinal epithelial regeneration through epigenetic silencing of cell cycle-related genes. *Nature communications*, 17(1).

Lunding LP, et al. (2026) Immune Training of the Interleukin 6 Gene in Airway Epithelial Cells is Central to Asthma Exacerbations. *Allergy*, 81(1), 157.

Marks RA, et al. (2026) The architecture of resilience: a genome assembly of *Myrothamnus flabellifolia* sheds light on desiccation tolerance and sex determination. *The New phytologist*, 249(2), 1063.

Naumann M, et al. (2026) RIG-I Mediated Neuron-Specific IFN Type 1 Signaling in FUS-ALS Induces Neurodegeneration and Offers New Biomarker-Driven Individualized Treatment Options for (FUS-)ALS. *Advanced science (Weinheim, Baden-Wurtemberg, Germany)*, 13(18), e17135.

Rössner LH, et al. (2026) Gene and genome duplications have contrasting impacts on biosynthetic and flower developmental pathways in California poppy. *The Plant cell*, 38(3).

Roulleaux-Dugage M, et al. (2026) VEGF-A blockade overcomes liver metastases resistance to chemoimmunotherapy in patients with advanced non-squamous NSCLC. *Journal for immunotherapy of cancer*, 14(6).

Rallis D, et al. (2026) Detection of sex chromosomes in Tephritid pests using R-CQ and KAMY, two computational methods to support generic pest management applications. *Insect science*, 33(2), 665.

Storek KM, et al. (2026) The BaeSR two-component system activates bamK, a paralog of the essential β -barrel foldase bamA, in *Klebsiella pneumoniae*. *mBio*, 17(4), e0349724.

Silva-Córdoba A, et al. (2026) A single genomic region controls primocane fruiting in tetraploid blackberry. *Genetics*, 233(2).

- Wang A, et al. (2026) Cross-species dissection of saline-related genes by genetically deciphering a euryhaline microalga *Chlorella* sp. *Nature communications*, 17(1), 1577.
- Collier AE, et al. (2026) ctDNA and tumor-based biomarkers of giredestrant response in *acelERA* breast cancer. *Nature communications*, 17(1).
- Kschonsak YT, et al. (2026) Tumor-targeted bispecific antibodies effectively inhibit oncogenic pathways while minimizing toxicity. *Science advances*, 12(21), eadx3959.
- Morris GP, et al. (2026) A sorghum pangenome reference improves global crop trait discovery. *Nature*, 652(8112), 1245.
- Eshghi ST, et al. (2026) A single-cell atlas of ulcerative colitis reveals neutrophil-stromal circuits linked to biologic therapy resistance. *Frontiers in immunology*, 17, 1705328.
- Parris S, et al. (2025) Polyploidy-mediated variations in glutamate receptor proteins linked to *Fusarium* wilt resistance in upland cotton. *The Plant journal : for cell and molecular biology*, 122(1), e70125.
- Aghdam MN, et al. (2025) Systems genetics of lifespan and senescence in *Drosophila melanogaster*. *BMC biology*, 24(1), 8.
- DeSisto J, et al. (2025) PRMT5 Maintains Tumor Stem Cells to Promote Pediatric High-Grade Glioma Tumorigenesis. *Molecular cancer research : MCR*, 23(2), 107.
- Patterson E, et al. (2025) Developmental constraint underlies the replicated evolution of grass awns. *The New phytologist*, 245(2), 835.
- Lötter A, et al. (2025) A haplotype-resolved reference genome for *Eucalyptus grandis*. *G3 (Bethesda, Md.)*, 15(7).