

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

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: 20260801T190727+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 784 mentions in open access literature.

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

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.

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.

Lou S, et al. (2025) Functional variant at 19q13.3 confers nonsyndromic cleft palate susceptibility by regulating HIF3A. *iScience*, 28(2), 111829.

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.

Lötter A, et al. (2025) A haplotype-resolved reference genome for *Eucalyptus grandis*. *G3 (Bethesda, Md.)*, 15(7).

Prentout D, et al. (2025) Evolution of Sex-Biased Gene Expression During Transitions to Separate Sexes in the *Silene* Genus. *Molecular biology and evolution*, 42(10).

Galsky MD, et al. (2025) Different PD-L1 Assays Reveal Distinct Immunobiology and Clinical Outcomes in Urothelial Cancer. *Cancer immunology research*, 13(4), 476.

Kroeze Y, et al. (2025) Genetic Inactivation of the Serotonin Transporter Dysregulates Expression of Neurotransmission Genes and Genome-Wide DNA Methylation Levels in the Medial Prefrontal Cortex of Male Rats During Postnatal Development. *Developmental neurobiology*, 85(3), e22973.

Zuazo-Gaztelu I, et al. (2025) A nonenzymatic dependency on inositol-requiring enzyme 1 controls cancer cell cycle progression and tumor growth. *PLoS biology*, 23(4), e3003086.

Wu W, et al. (2025) ASET: An end-to-end pipeline for quantification and visualization of allele specific expression. Research square.

Yu J, et al. (2025) Camrelizumab, an Anti-PD-1 Monoclonal Antibody, Plus Carboplatin and Nab-Paclitaxel as First-Line Setting for Extensive-Stage Small-Cell Lung Cancer: A Phase 2 Trial and Biomarker Analysis. MedComm, 6(8), e70300.

Thorhólludottir DAV, et al. (2025) Reduced Parallel Gene Expression Evolution With Increasing Genetic Divergence-A Hallmark of Polygenic Adaptation. Molecular ecology, 34(12), e17803.

Beck EA, et al. (2025) Spontaneous mutant in threespine stickleback connects endosome trafficking disorders and inflammatory bowel diseases via changes in the gut microbiome. bioRxiv : the preprint server for biology.

McCluskey BM, et al. (2025) The hybrid history of zebrafish. G3 (Bethesda, Md.), 15(2).

Nakano Y, et al. (2025) Genome-wide profiling of tRNA modifications by Induro-tRNAseq reveals coordinated changes. Nature communications, 16(1), 1047.

Paul S, et al. (2025) Cooperation between the Hippo and MAPK pathway activation drives acquired resistance to TEAD inhibition. Nature communications, 16(1), 1743.

Liang H, et al. (2025) Wnt/ERK/CDK4/6 activation in the partial EMT state coordinates mammary cancer stemness with self-renewal and inhibition of differentiation. British journal of cancer, 133(7), 986.

Baty SM, et al. (2025) Strong Signatures of Selection on Candidate Genes Underlying Core Speciation Mechanisms in Desert Tortoises. Molecular ecology resources, 25(6), e14098.