

Resource Summary Report

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MIPgen

RRID:SCR_003325

Type: Tool

Proper Citation

MIPgen (RRID:SCR_003325)

Resource Information

URL: <http://shendurelab.github.io/MIPGEN/>

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Description: Software for a fast, simple way to generate designs for MIP assays targeting hundreds or thousands of genomic loci in parallel. Packaged with MIPgen are scripts that aid in visualization of MIP designs and processing of MIP sequence reads to SAM files that can then be passed through any standard variant calling pipeline.

Synonyms: MIPgen - One stop MIP design and analysis

Resource Type: software resource

Defining Citation: [PMID:24867941](#)

Keywords: standalone software, c++, python, bio.tools

Availability: Free, Available for download, Freely available

Resource Name: MIPgen

Resource ID: SCR_003325

Alternate IDs: OMICS_04657, biotools:mipgen

Alternate URLs: <https://github.com/shendurelab/MIPGEN>, <https://bio.tools/mipgen>

Record Creation Time: 20220129T080218+0000

Record Last Update: 20260808T185756+0000

Ratings and Alerts

No rating or validation information has been found for MIPgen.

No alerts have been found for MIPgen.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 52 mentions in open access literature.

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

Vandenhoeck J, et al. (2026) Methylation biomarkers can distinguish pleural mesothelioma from healthy pleura and other pleural pathologies. *Molecular oncology*, 20(4), 933.

Hany U, et al. (2025) Genetic Screening of a Nonsyndromic Amelogenesis Imperfecta Patient Cohort Using a Custom smMIP Reagent for Selective Enrichment of Target Loci. *Human mutation*, 2025, 8942542.

Sussman JH, et al. (2025) In vivo CRISPR screening reveals epigenetic regulators of hepatobiliary plasticity. *Genes & development*, 39(9-10), 603.

Lecoquierre F, et al. (2025) Parental germline mosaicism in genome-wide phased de novo variants: Recurrence risk assessment and implications for precision genetic counselling. *PLoS genetics*, 21(3), e1011651.

Ishorst N, et al. (2025) Role of ZFHX4 in orofacial clefting based on human genetic data and zebrafish models. *European journal of human genetics : EJHG*, 33(5), 595.

Sierant MC, et al. (2025) Genomic analysis of 11,555 probands identifies 60 dominant congenital heart disease genes. *Proceedings of the National Academy of Sciences of the United States of America*, 122(13), e2420343122.

Gallon R, et al. (2025) Novel microsatellite instability test of sebaceous tumours to facilitate low-cost universal screening for Lynch syndrome. *Clinical and experimental dermatology*, 50(6), 1155.

Shin T, et al. (2024) Rare variation in non-coding regions with evolutionary signatures contributes to autism spectrum disorder risk. *Cell genomics*, 4(8), 100609.

Sheth H, et al. (2024) Development, validation and application of single molecule molecular inversion probe based novel integrated genetic screening method for 29 common lysosomal storage disorders in India. *Human genomics*, 18(1), 46.

Van Dijck E, et al. (2024) A Case-Control Study Supports Genetic Contribution of the PON Gene Family in Obesity and Metabolic Dysfunction Associated Steatotic Liver Disease. *Antioxidants (Basel, Switzerland)*, 13(9).

Plowman JN, et al. (2024) Targeted sequencing for hereditary breast and ovarian cancer in BRCA1/2-negative families reveals complex genetic architecture and phenocopies. *HGG advances*, 5(3), 100306.

Hany U, et al. (2024) Heterozygous COL17A1 variants are a frequent cause of amelogenesis imperfecta. *Journal of medical genetics*, 61(4), 347.

Kadam A, et al. (2024) Utilizing insights of DNA repair machinery to discover MMEJ deletions and novel mechanisms. *Nucleic acids research*, 52(22), e106.

Lecoquierre F, et al. (2024) Assessment of parental mosaicism rates in neurodevelopmental disorders caused by apparent de novo pathogenic variants using deep sequencing. *Scientific reports*, 14(1), 5289.

Almomani R, et al. (2023) Genetic Profiling of Sodium Channels in Diabetic Painful and Painless and Idiopathic Painful and Painless Neuropathies. *International journal of molecular sciences*, 24(9).

Smits WK, et al. (2023) Elevated enhancer-oncogene contacts and higher oncogene expression levels by recurrent CTCF inactivating mutations in acute T cell leukemia. *Cell reports*, 42(4), 112373.

Shin T, et al. (2023) Rare variation in noncoding regions with evolutionary signatures contributes to autism spectrum disorder risk. *medRxiv : the preprint server for health sciences*.

Konopiński MK, et al. (2023) Complex patterns shape immune genes diversity during invasion of common raccoon in Europe - Selection in action despite genetic drift. *Evolutionary applications*, 16(1), 134.

Andralojc KM, et al. (2022) Targeted RNA next generation sequencing analysis of cervical smears can predict the presence of hrHPV-induced cervical lesions. *BMC medicine*, 20(1), 206.

Medeiros JJF, et al. (2022) SmMIP-tools: a computational toolset for processing and analysis of single-molecule molecular inversion probes-derived data. *Bioinformatics (Oxford, England)*, 38(8), 2088.