Resource Summary Report

Generated by RRID on May 15, 2025

<u>AutDB</u>

RRID:SCR_001872 Type: Tool

Proper Citation

AutDB (RRID:SCR_001872)

Resource Information

URL: http://autism.mindspec.org/autdb/

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Description: Curated public database for autism research built on information extracted from the studies on molecular genetics and biology of Autism Spectrum Disorders (ASD). The genetic information includes data from linkage and association studies, cytogenetic abnormalities, and specific mutations associated with ASD. New gene submissions are welcome. Modules: * Human Gene: thoroughly annotated list of genes that have been studied in the context of autism, with information on the genes themselves, relevant references from the literature, and the nature of the evidence. Uniquely, SFARI Gene incorporates information on both common and rare variants. * Animal Model: information about lines of genetically modified mice that represent potential models of autism. This information includes the nature of the targeting construct, the background strain and, most importantly, a thorough summary of the phenotypic features of the mice that are most relevant to autism. * Protein Interaction (PIN): compilation of all known direct protein interactions for those gene products implicated in autism. It presents both graphical and tabular views of interactomes, highlighting connections between autism candidate genes. Each protein interaction is manually verified by consultation with the primary reference. * Copy Number Variant (CNV): a parallel resource providing genetic information about all known copy number variants linked to autism. * Gene Scoring: includes a "score" for each autism candidate gene, based on an assessment of the strength of human genetic evidence.

Abbreviations: AutDB

Synonyms: AutDB - An Interface to Autism Research, Simons Foundation Autism Research Initiative Gene: Autism Database, SFARI Gene: AutDB, SFARI Gene, AutDB: a Genetic Database for Autism Spectrum Disorders **Resource Type:** service resource, data repository, data or information resource, database, storage service resource

Defining Citation: PMID:19015121

Keywords: duplication, gene, genetic syndrome, genetic variation, allelic, autism, autism spectrum disorder, deletion, molecular function, molecular genetics, single-gene disruption, genetic association, genetic variation, allelic variant, copy number variant, cytogenetic, disruption, idiopathic asd, monogenic, mutation, polymorphism, human, animal model, mouse, protein interaction, sfari gene, phenotype, protein interaction, gene scoring, systems biology

Related Condition: Autism Spectrum Disorder, Autism

Funding: MindSpec: Informatics for Neurodevelopmental Conditions

Availability: Public, The community can contribute to this resource, Acknowledgement requested

Resource Name: AutDB

Resource ID: SCR_001872

Alternate IDs: nif-0000-02587

Alternate URLs: http://www.mindspec.org/products/autdb/, https://gene.sfari.org/autdb/

Record Creation Time: 20220129T080210+0000

Record Last Update: 20250514T061211+0000

Ratings and Alerts

No rating or validation information has been found for AutDB.

No alerts have been found for AutDB.

Data and Source Information

Source: <u>SciCrunch Registry</u>

Usage and Citation Metrics

We found 39 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>RRID</u>.

Mirabella F, et al. (2025) Glycosylation Pathways Targeted by Deregulated miRNAs in Autism Spectrum Disorder. International journal of molecular sciences, 26(2).

Dahawi M, et al. (2024) Genetic heterogeneity in familial forms of genetic generalized epilepsy: from mono- to oligogenism. Human genomics, 18(1), 130.

LeMaster C, et al. (2024) Mapping structural variants to rare disease genes using long-read whole genome sequencing and trait-relevant polygenic scores. medRxiv : the preprint server for health sciences.

Bar O, et al. (2024) Reanalysis of Trio Whole-Genome Sequencing Data Doubles the Yield in Autism Spectrum Disorder: De Novo Variants Present in Half. International journal of molecular sciences, 25(2).

Kereszturi É, et al. (2024) Database-assisted screening of autism spectrum disorder related gene set. Molecular brain, 17(1), 55.

Zhao X, et al. (2023) Prioritizing genes associated with brain disorders by leveraging enhancer-promoter interactions in diverse neural cells and tissues. Genome medicine, 15(1), 56.

More RP, et al. (2023) Identifying rare genetic variants in 21 highly multiplex autism families: the role of diagnosis and autistic traits. Molecular psychiatry, 28(5), 2148.

Wang T, et al. (2023) Shared and divergent contribution of vitamin A and oxytocin to the aetiology of autism spectrum disorder. Computational and structural biotechnology journal, 21, 3109.

Wang T, et al. (2022) Integrative analysis prioritised oxytocin-related biomarkers associated with the aetiology of autism spectrum disorder. EBioMedicine, 81, 104091.

Panzenhagen AC, et al. (2022) Behavioral manifestations in rodent models of autism spectrum disorder: protocol for a systematic review and network meta-analysis. Systematic reviews, 11(1), 150.

Sakamoto Y, et al. (2021) Copy number variations in Japanese children with autism spectrum disorder. Psychiatric genetics, 31(3), 79.

Vu TD, et al. (2021) A unique neurogenomic state emerges after aggressive confrontations in males of the fish Betta splendens. Gene, 784, 145601.

Dhaliwal J, et al. (2021) Contribution of Multiple Inherited Variants to Autism Spectrum Disorder (ASD) in a Family with 3 Affected Siblings. Genes, 12(7).

Milone R, et al. (2021) 17q12 Recurrent Deletions and Duplications: Description of a Case Series with Neuropsychiatric Phenotype. Genes, 12(11).

Huang J, et al. (2021) A Next Generation Sequencing-Based Protocol for Screening of Variants of Concern in Autism Spectrum Disorder. Cells, 11(1).

Shen L, et al. (2021) Comparative analysis of the autism?related variants between different autistic children in a family pedigree. Molecular medicine reports, 24(4).

He D, et al. (2021) Prioritization of schizophrenia risk genes from GWAS results by integrating multi-omics data. Translational psychiatry, 11(1), 175.

Huang ZX, et al. (2021) Systematic Review and Bioinformatic Analysis of microRNA Expression in Autism Spectrum Disorder Identifies Pathways Associated With Cancer, Metabolism, Cell Signaling, and Cell Adhesion. Frontiers in psychiatry, 12, 630876.

Mizuno S, et al. (2020) Comprehensive Profiling of Gene Expression in the Cerebral Cortex and Striatum of BTBRTF/ArtRbrc Mice Compared to C57BL/6J Mice. Frontiers in cellular neuroscience, 14, 595607.

Liu D, et al. (2020) Exploratory Data Mining for Subgroup Cohort Discoveries and Prioritization. IEEE journal of biomedical and health informatics, 24(5), 1456.