Resource Summary Report

Generated by NIF on May 20, 2025

MouseNET

RRID:SCR_003357

Type: Tool

Proper Citation

MouseNET (RRID:SCR_003357)

Resource Information

URL: http://mouseNET.princeton.edu

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Description: A functional network for laboratory mouse based on integration of diverse genetic and genomic data. It allows the users to accurately predict novel functional assignments and network components. MouseNET uses a probabilistic Bayesian algorithm to identify genes that are most likely to be in the same pathway/functional neighborhood as your genes of interest. It then displays biological network for the resulting genes as a graph. The nodes in the graph are genes (clicking on each node will bring up SGD page for that gene) and edges are interactions (clicking on each edge will show evidence used to predict this interaction). Most likely, the first results to load on the results page will be a list of significant Gene Ontology terms. This list is calculated for the genes in the biological network created by the mouseNET algorithm. If a gene ontology term appears on this list with a low pvalue, it is statistically significantly overrepresented in this biological network. The graph may be explored further. As you move the mouse over genes in the network, interactions involving these genes are highlighted. If you click on any of the highlighted interactions graph, evidence pop-up window will appear. The Evidence pop-up lists all evidence for this interaction, with links to the papers that produced this evidence - clicking these links will bring up the relevant source citation(s) in PubMed.

Abbreviations: mouseNet

Synonyms: MouseNET

Resource Type: service resource, production service resource, data analysis service,

database, analysis service resource, data or information resource

Defining Citation: PMID:18818725

Keywords: gene, network, mouse, protein function, visualization, open reading frame, graph

Funding: NSF DBI-0546275; NIGMS R01 GM071966; NSF US-0513552:

NSF IIS-0513552;

NIGMS P50 GM071508

Resource Name: MouseNET

Resource ID: SCR_003357

Alternate IDs: OMICS_01550, nif-0000-32003

Record Creation Time: 20220129T080218+0000

Record Last Update: 20250519T203245+0000

Ratings and Alerts

No rating or validation information has been found for MouseNET.

No alerts have been found for MouseNET.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 2 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Bigan E, et al. (2020) Genetic cooperativity in multi-layer networks implicates cell survival and senescence in the striatum of Huntington's disease mice synchronous to symptoms. Bioinformatics (Oxford, England), 36(1), 186.

Paredes-Sánchez FA, et al. (2015) Associations of SNPs located at candidate genes to bovine growth traits, prioritized with an interaction networks construction approach. BMC genetics, 16, 91.