Resource Summary Report

Generated by dkNET on Sep 16, 2026

ResponseNet

RRID:SCR_003176
Type: Tool

Proper Citation

ResponseNet (RRID:SCR_003176)

Resource Information

URL: https://netbio.bgu.ac.il/labwebsite/software/responsenet/

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Description: WebServer that identifies high-probability signaling and regulatory paths that connect input data sets. The input includes two weighted lists of condition-related proteins and genes, such as a set of disease-associated proteins and a set of differentially expressed disease genes, and a molecular interaction network (i.e., interactome). The output is a sparse, high-probability interactome sub-network connecting the two sets that is biased toward signaling pathways. This sub-network exposes additional proteins that are potentially involved in the studied condition and their likely modes of action. Computationally, it is formulated as a minimum-cost flow optimization problem that is solved using linear programming.

Abbreviations: ResponseNet

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

Defining Citation: PMID:23761447, PMID:21576238

Keywords: interactome, gene, protein, signaling pathway, signaling, regulatory, pathway, regulatory pathway, bio.tools

Availability: Free, Freely available

Resource Name: ResponseNet

Resource ID: SCR_003176

Alternate IDs: biotools:responsenet, OMICS_01562

Alternate URLs: https://bio.tools/responsenet

Old URLs: http://netbio.bgu.ac.il/respnet/

Record Creation Time: 20220129T080217+0000

Record Last Update: 20260912T200128+0000

Ratings and Alerts

No rating or validation information has been found for ResponseNet.

No alerts have been found for ResponseNet.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Baker SF, et al. (2022) Alternative splicing liberates a cryptic cytoplasmic isoform of mitochondrial MECR that antagonizes influenza virus. PLoS biology, 20(12), e3001934.

Basha O, et al. (2019) ResponseNet v.3: revealing signaling and regulatory pathways connecting your proteins and genes across human tissues. Nucleic acids research, 47(W1), W242.

Nguyen H, et al. (2019) A Comprehensive Survey of Tools and Software for Active Subnetwork Identification. Frontiers in genetics, 10, 155.

Iacovella MG, et al. (2018) Integrating Rio1 activities discloses its nutrient-activated network in Saccharomyces cerevisiae. Nucleic acids research, 46(15), 7586.