Resource Summary Report

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GOMO - Gene Ontology for Motifs

RRID:SCR_008864
Type: Tool

Proper Citation

GOMO - Gene Ontology for Motifs (RRID:SCR_008864)

Resource Information

URL: http://meme.nbcr.net/meme/cgi-bin/gomo.cgi

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Description: Gene Ontology for Motifs (GOMO) is an alignment- and threshold-free comparative genomics approach for assigning functional roles to DNA regulatory motifs from DNA sequence. The algorithm detects associations between a user-specified DNA regulatory motif (expressed as a position weight matrix; PWM) and Gene Ontology terms. The original method for predicting the roles of transcription factors (TFs starts with a PWM motif describing the DNA-binding affinity of the TF. GOMO uses the PWM to score the promoter region of each gene in the genome for its likelihood to be bound by the TF. The resulting ""affinity"" scores are then used to test each term in the Gene Ontology for association with high-scoring genes. The algorithm was subsequently extended to leverage conserved signals using multiple, related species in a comparative approach, which greatly improves the resulting annotations. Platform: Online tool, Windows compatible, Mac OS X compatible, Linux compatible, Unix compatible

Abbreviations: GOMO

Synonyms: Gene Ontology for Motifs

Resource Type: data analysis service, service resource, software resource, software application, analysis service resource, production service resource, data processing software

Defining Citation: PMID:20147307, PMID:18544606

Keywords: gene, motif, genomics, gene ontology, function, compare, ontology or annotation editor, statistical analysis, dna binding motif, dna binding, dna, transcription factor, sequence

Funding: Australian Research Council ;

University of Queensland; Brisbane; Australia ;
International Research Tuition Award ;
NCRR R01 RR021692

Availability: Free for academic use

Resource Name: GOMO - Gene Ontology for Motifs

Resource ID: SCR_008864

Alternate IDs: nlx_149250

Record Creation Time: 20220129T080249+0000

Record Last Update: 20250521T061258+0000

Ratings and Alerts

No rating or validation information has been found for GOMO - Gene Ontology for Motifs.

No alerts have been found for GOMO - Gene Ontology for Motifs.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3 mentions in open access literature.

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

Xie S, et al. (2018) Microarray Analysis of Differentially-expressed MicroRNAs in Acquired Middle Ear Cholesteatoma. International journal of medical sciences, 15(13), 1547.

Guerra D, et al. (2014) The largest unassigned regions of the male- and female-transmitted mitochondrial DNAs in Musculista senhousia (Bivalvia Mytilidae). Gene, 536(2), 316.

Ghiselli F, et al. (2013) Structure, transcription, and variability of metazoan mitochondrial genome: perspectives from an unusual mitochondrial inheritance system. Genome biology and evolution, 5(8), 1535.