Tree families database
RRID:SCR_013401
Type: Tool

Proper Citation

Tree families database (RRID:SCR_013401)

Resource Information

URL: http://www.treefam.org

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Description: A database of phylogenetic trees of animal genes. It aims at developing a curated resource that gives reliable information about ortholog and paralog assignments, and evolutionary history of various gene families. TreeFam defines a gene family as a group of genes that evolved after the speciation of single-metazoan animals. It also tries to include outgroup genes like yeast (S. cerevisiae and S. pombe) and plant (A. thaliana) to reveal these distant members. TreeFam is also an ortholog database. Unlike other pairwise alignment based ones, TreeFam infers orthologs by means of gene trees. It fits a gene tree into the universal species tree and finds historical duplications, speciations and losses events. TreeFam uses this information to evaluate tree building, guide manual curation, and infer complex ortholog and paralog relations. The basic elements of TreeFam are gene families that can be divided into two parts: TreeFam-A and TreeFam-B families. TreeFam-B families are automatically created. They might contain errors given complex phylogenies. TreeFam-A families are manually curated from TreeFam-B ones. Family names and node names are assigned at the same time. The ultimate goal of TreeFam is to present a curated resource for all the families. phylogenetic tree, animal, vertebrate, invertebrate, gene, ortholog, paralog, evolutionary history, gene families, single-metazoan animals, outgroup genes like yeast (S. cerevisiae and S. pombe), plant (A. thaliana), historical duplications, speciations, losses, Human, Genome, comparative genomics

Synonyms: TreeFam, Tree families database

Resource Type: data or information resource, database

Keywords: evolutionary history, gene, gene families, genome, animal, comparative genomics, historical duplications, human, invertebrate, losses, ortholog, outgroup genes like
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Resource ID: SCR_013401
Alternate IDs: nif-0000-03588

Ratings and Alerts

No rating or validation information has been found for Tree families database.
No alerts have been found for Tree families database.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 79 mentions in open access literature.

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


Pan C, et al. (2022) A systematic pan-cancer study demonstrates the oncogenic function of heterogeneous nuclear ribonucleoprotein C. Aging, 14(6), 2880.


Oura S, et al. (2022) Trim41 is required to regulate chromosome axis protein dynamics and meiosis in male mice. PLoS genetics, 18(6), e1010241.


Xue DX, et al. (2022) A high-quality chromosome-level genome of the endangered roughskin sculpin provides insights into its evolution and adaptation. Molecular ecology resources.


Rudolph J, et al. (2021) HPF1 and nucleosomes mediate a dramatic switch in activity of PARP1 from polymerase to hydrolase. eLife, 10.


