Resource Summary Report

Generated by NIF on Apr 26, 2025

FEATURE

RRID:SCR_002648 Type: Tool

Proper Citation

FEATURE (RRID:SCR_002648)

Resource Information

URL: https://simtk.org/home/feature

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Description: A suite of automated tools that examine biological molecules and produces useful representations of the key biophysical and biochemical features of these structures that are critical for understanding function. The utility of this system extends from medical / pharmaceutical applications (model-based drug design, comparing pharmacological activities) to industrial applications (understanding structural stability, protein engineering). The FEATURE code is made available, without too much support, to any interested scientists. Audience: Researchers interested in identifying functional sites in protein structures. Long Term Goals and Related Uses: Enable improved functional site prediction.

Resource Type: modeling software, d visualization software

Keywords: functional site, function annotation, calcium binding site, protein microenvironment, structural bioinformatics, structure, protein classification, bayesian inference, support vector machine, model

Funding:

Availability: MIT license

Resource Name: FEATURE

Resource ID: SCR_002648

Alternate IDs: nif-0000-23304

Record Creation Time: 20220129T080214+0000

Record Last Update: 20250424T064602+0000

Ratings and Alerts

No rating or validation information has been found for FEATURE.

No alerts have been found for FEATURE.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 31 mentions in open access literature.

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

Madden DJ, et al. (2024) Age-related differences in resting-state, task-related, and structural brain connectivity: graph theoretical analyses and visual search performance. Brain structure & function, 229(7), 1533.

Wang P, et al. (2024) The association between the neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio, and lymphocyte-to-monocyte ratio and delirium in ischemic stroke patients. Frontiers in medicine, 11, 1456742.

Kumar K, et al. (2024) SWI/SNF complex-mediated chromatin remodeling in Candida glabrata promotes immune evasion. iScience, 27(4), 109607.

Chen L, et al. (2024) Epitome of the Region-Regional Nostalgia Design Based on Digital Twins. Behavioral sciences (Basel, Switzerland), 15(1).

Man KH, et al. (2024) SOX10 mediates glioblastoma cell-state plasticity. EMBO reports.

Zhou C, et al. (2023) Multiparametric MRI radiomics in prostate cancer for predicting Ki-67 expression and Gleason score: a multicenter retrospective study. Discover. Oncology, 14(1), 133.

Schmidt A, et al. (2023) Predicting the pathogenicity of missense variants using features derived from AlphaFold2. Bioinformatics (Oxford, England), 39(5).

Fong WJ, et al. (2023) Comparing feature selection and machine learning approaches for predicting CYP2D6 methylation from genetic variation. Frontiers in neuroinformatics, 17, 1244336.

Simopoulos CMA, et al. (2022) MetaProClust-MS1: an MS1 Profiling Approach for Large-Scale Microbiome Screening. mSystems, 7(4), e0038122.

Yu HC, et al. (2021) Down-Regulation of LOC645166 in T Cells of Ankylosing Spondylitis Patients Promotes the NF-?B Signaling via Decreasingly Blocking Recruitment of the IKK Complex to K63-Linked Polyubiquitin Chains. Frontiers in immunology, 12, 591706.

Toth JM, et al. (2021) ResiRole: residue-level functional site predictions to gauge the accuracies of protein structure prediction techniques. Bioinformatics (Oxford, England), 37(3), 351.

Jung K, et al. (2021) Response of multiple demand network to visual search demands. NeuroImage, 229, 117755.

Ting HC, et al. (2021) Coactivation of GSK3? and IGF-1 Attenuates Amyotrophic Lateral Sclerosis Nerve Fiber Cytopathies in SOD1 Mutant Patient-Derived Motor Neurons. Cells, 10(10).

Houghton K, et al. (2021) Correlation Between Change in Psoriasis Area and Severity Index and Dermatology Life Quality Index in Patients with Psoriasis: Pooled Analysis from Four Phase 3 Clinical Trials of Secukinumab. Dermatology and therapy, 11(4), 1373.

Wang YW, et al. (2021) The significance of SMARCB1 in the pathogenesis of renal cell carcinoma with rhabdoid features. Translational oncology, 14(10), 101175.

Chen L, et al. (2020) Transcriptional profiling reveals altered biological characteristics of chorionic stem cells from women with gestational diabetes. Stem cell research & therapy, 11(1), 319.

Lam JH, et al. (2019) A deep learning framework to predict binding preference of RNA constituents on protein surface. Nature communications, 10(1), 4941.

Li H, et al. (2018) Submicroscopic chromosomal imbalances contribute to early abortion. Molecular cytogenetics, 11, 41.

Torng W, et al. (2017) 3D deep convolutional neural networks for amino acid environment similarity analysis. BMC bioinformatics, 18(1), 302.

Kwon MJ, et al. (2017) Genes co-amplified with ERBB2 or MET as novel potential cancerpromoting genes in gastric cancer. Oncotarget, 8(54), 92209.