

Resource Summary Report

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SPIKE

RRID:SCR_010466

Type: Tool

Proper Citation

SPIKE (RRID:SCR_010466)

Resource Information

URL: <http://www.cs.tau.ac.il/~spike/>

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Description: Database of curated human signaling pathways with an associated interactive software tool for analysis and dynamic visualization of pathways. Individual pathway maps can be viewed and downloaded; the entire database may be browsed, or launched via a map viewer tool that allows dynamic visualization of the database and save networks in XGMML format that can be viewed in all generic XGMML viewers. Map Topics * Cell cycle progress and check points * DNA damage response * Programmed cell death related processes * Stress-activated transcription factors * Mitogen-activated protein kinase pathways * Immune response signaling * HEarSpike: hearing related pathways

Abbreviations: SPIKE

Synonyms: Signaling Pathway Integrated Knowledge Engine

Resource Type: database, data or information resource, service resource

Defining Citation: [PMID:21097778](#), [PMID:18289391](#)

Keywords: visualization, analysis, cellular, signaling pathway, regulatory network, function, genomic, proteomic, cell cycle, dna damage, cell death, stress, transcription factor, mitogen, protein kinase, pathway, immune response, signaling, hearing, dna damage response, programmed cell death, development, ear, bio.tools, FASEB list

Related Condition: Cancer

Funding Agency: A-T Children's Project, Wolfson Foundation, European Union FP7, Israel Science Foundation

Resource Name: SPIKE

Resource ID: SCR_010466

Alternate IDs: biotools:spike, nlx_157705

Alternate URLs: <https://bio.tools/spike>

Ratings and Alerts

No rating or validation information has been found for SPIKE.

No alerts have been found for SPIKE.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 115 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Malar DS, et al. (2024) Network analysis-guided drug repurposing strategies targeting LPAR receptor in the interplay of COVID, Alzheimer's, and diabetes. Scientific reports, 14(1), 4328.

Chen Y, et al. (2023) Improving the performance of single-cell RNA-seq data mining based on relative expression orderings. Briefings in bioinformatics, 24(1).

Rosichini M, et al. (2023) SARS-CoV-2 infection of thymus induces loss of function that correlates with disease severity. The Journal of allergy and clinical immunology, 151(4), 911.

Dukes CW, et al. (2023) Neutralizing Antibody Response following a Third Dose of the mRNA-1273 Vaccine among Cancer Patients. Vaccines, 12(1).

Batin MA, et al. (2023) WheatSpikeNet: an improved wheat spike segmentation model for accurate estimation from field imaging. Frontiers in plant science, 14, 1226190.

Gfeller D, et al. (2023) Improved predictions of antigen presentation and TCR recognition with MixMHCpred2.2 and PRIME2.0 reveal potent SARS-CoV-2 CD8+ T-cell epitopes. Cell systems, 14(1), 72.

Cicka D, et al. (2023) TMPRSS2 and SARS-CoV-2 SPIKE interaction assay for uHTS. *Journal of molecular cell biology*, 15(3).

Khasabova IA, et al. (2023) Exosome-associated lysophosphatidic acid signaling contributes to cancer pain. *Pain*, 164(12), 2684.

Palasser M, et al. (2023) Ultra-Accurate Correlation between Precursor and Fragment Ions in Two-Dimensional Mass Spectrometry: Acetylated vs Trimethylated Histone Peptides. *Journal of the American Society for Mass Spectrometry*, 34(4), 608.

Polák M, et al. (2023) Top-Down Proteoform Analysis by 2D MS with Quadrupolar Detection. *Analytical chemistry*, 95(44), 16123.

Tornesello AL, et al. (2023) Immune profiling of SARS-CoV-2 epitopes in asymptomatic and symptomatic pediatric and adult patients. *Journal of translational medicine*, 21(1), 123.

Fan J, et al. (2023) A Hyperflexible Electrode Array for Long-Term Recording and Decoding of Intraspinal Neuronal Activity. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 10(33), e2303377.

Sotomayor-Gómez B, et al. (2023) SpikeShip: A method for fast, unsupervised discovery of high-dimensional neural spiking patterns. *PLoS computational biology*, 19(7), e1011335.

Lee JN, et al. (2022) Improvement in the efficiency of the five-axis machining of aerospace blisks. *Science progress*, 105(4), 368504221128776.

Bosque-Cordero KY, et al. (2022) Ih blockade reduces cocaine-induced firing patterns of putative dopaminergic neurons of the ventral tegmental area in the anesthetized rat. *Progress in neuro-psychopharmacology & biological psychiatry*, 112, 110431.

Broussot L, et al. (2022) A non-canonical GABAergic pathway to the VTA promotes unconditioned freezing. *Molecular psychiatry*, 27(12), 4905.

Dong W, et al. (2022) The K18-Human ACE2 Transgenic Mouse Model Recapitulates Non-severe and Severe COVID-19 in Response to an Infectious Dose of the SARS-CoV-2 Virus. *Journal of virology*, 96(1), e0096421.

Tabassum S, et al. (2021) Disrupted prefrontal neuronal oscillations and morphology induced by sleep deprivation in young APP/PS1 transgenic AD mice. *Brain research bulletin*, 166, 12.

Beebe NL, et al. (2021) Multiple Sources of Cholinergic Input to the Superior Olivary Complex. *Frontiers in neural circuits*, 15, 715369.

Delsuc MA, et al. (2021) Phase Correction for Absorption Mode Two-Dimensional Mass Spectrometry. *Molecules (Basel, Switzerland)*, 26(11).