Resource Summary Report

Generated by NIF on May 25, 2025

BROCCOLI

RRID:SCR_014093
Type: Tool

Proper Citation

BROCCOLI (RRID:SCR_014093)

Resource Information

URL: http://www.nitrc.org/projects/broccoli/

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Description: A software package written in OpenCL (Open Computing Language) that can be used for parallel analysis of fMRI data on a large variety of hardware configurations. If BROCCOLI is running on a GPU, it can perform non-linear spatial normalization to a 1 mm brain template in 4-6 s and run a second level permutation test with 10,000 permutations.

Resource Type: data processing software, software resource, image analysis software, software application

Keywords: software package, parallel analysis, fmri, non linear spatial normalization, brain

Funding:

Availability: Free

Resource Name: BROCCOLI

Resource ID: SCR_014093

Alternate URLs: https://github.com/wanderine/BROCCOLI/

License: GNU General Public License

Record Creation Time: 20220129T080319+0000

Record Last Update: 20250525T032058+0000

Ratings and Alerts

No rating or validation information has been found for BROCCOLI.

No alerts have been found for BROCCOLI.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 17 mentions in open access literature.

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

Hamada HT, et al. (2024) Optogenetic activation of dorsal raphe serotonin neurons induces brain-wide activation. Nature communications, 15(1), 4152.

Kogay R, et al. (2024) Co-evolution of gene transfer agents and their alphaproteobacterial hosts. Journal of bacteriology, 206(2), e0039823.

Wittouck S, et al. (2024) SCARAP: scalable cross-species comparative genomics of prokaryotes. Bioinformatics (Oxford, England), 41(1).

Cicconardi F, et al. (2023) Evolutionary dynamics of genome size and content during the adaptive radiation of Heliconiini butterflies. Nature communications, 14(1), 5620.

Healey AL, et al. (2023) Newly identified sex chromosomes in the Sphagnum (peat moss) genome alter carbon sequestration and ecosystem dynamics. Nature plants, 9(2), 238.

Ferlazzo GM, et al. (2023) Genome-wide screening in pluripotent cells identifies Mtf1 as a suppressor of mutant huntingtin toxicity. Nature communications, 14(1), 3962.

Matthey-Doret C, et al. (2022) Chromosome-scale assemblies of Acanthamoeba castellanii genomes provide insights into Legionella pneumophila infection-related chromatin reorganization. Genome research, 32(9), 1698.

Deutekom ES, et al. (2021) Benchmarking orthology methods using phylogenetic patterns defined at the base of Eukaryotes. Briefings in bioinformatics, 22(3).

Xu H, et al. (2021) Comparative Genomics Sheds Light on the Convergent Evolution of Miniaturized Wasps. Molecular biology and evolution, 38(12), 5539.

Peng Y, et al. (2021) Combining protein and RNA quantification to evaluate promoter activity by using dual-color fluorescent reporting systems. Bioscience reports, 41(9).

He R, et al. (2020) The Combination of Selenium and LED Light Quality Affects Growth and Nutritional Properties of Broccoli Sprouts. Molecules (Basel, Switzerland), 25(20).

Teulière J, et al. (2020) The Distribution of Genes Associated With Regulated Cell Death Is Decoupled From the Mitochondrial Phenotypes Within Unicellular Eukaryotic Hosts. Frontiers in cell and developmental biology, 8, 536389.

Vaden KI, et al. (2020) Cingulo-opercular adaptive control for younger and older adults during a challenging gap detection task. Journal of neuroscience research, 98(4), 680.

Wylie GR, et al. (2019) Fatigue in Gulf War Illness is associated with tonically high activation in the executive control network. NeuroImage. Clinical, 21, 101641.

Grandjean J, et al. (2019) A brain-wide functional map of the serotonergic responses to acute stress and fluoxetine. Nature communications, 10(1), 350.

Eklund A, et al. (2014) BROCCOLI: Software for fast fMRI analysis on many-core CPUs and GPUs. Frontiers in neuroinformatics, 8, 24.

Marzoli D, et al. (2013) Environmental influences on mate preferences as assessed by a scenario manipulation experiment. PloS one, 8(9), e74282.