Resource Summary Report

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BrainStars

RRID:SCR_005810
Type: Tool

Proper Citation

BrainStars (RRID:SCR_005810)

Resource Information

URL: http://brainstars.org

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Description: BrainStars (or B*) is a quantitative expression database of the adult mouse brain. The database has genome-wide expression profile at 51 adult mouse CNS regions. For 51 CNS regions, slices (0.5-mm thick) of mouse brain were cut on a Mouse Brain Matrix, frozen, and the specific regions were punched out bilaterally with a microdissecting needle (gauge 0.5 mm) under a stereomicroscope. For each region, we took samples every 4 hours, starting at ZT0 (Zeitgaber time 0; the time of lights on), for 24 hours (6 time-point samples for each region), and we pooled the samples from the different time points. We independently sampled each region twice (n=2). These samples were purified their RNA, and measured with Affymetrix GeneChip Mouse Genome 430 2.0 arrays. Expression values were then summarized with the RMA method. After several analysis with the expression data, the data and analysis results were stored in the BrainStars database. The database has a REST-like Web API interface for accessing from your Web applications. This document shows how to access the database via our Web API.

Abbreviations: B*

Synonyms: BrainStars Database, BrainStars (B*)

Resource Type: data or information resource, data access protocol, web service, database, software resource

Defining Citation: PMID:21858037

Keywords: mouse, brain, adult, expression profile, affymetrix genechip mouse genome 430 2.0 array, rna, central nervous system, gene expression, gene

Funding: Japanese Ministry of Education Culture Sports Science and Technology MEXT

Resource Name: BrainStars

Resource ID: SCR_005810

Alternate IDs: nlx_149301

Record Creation Time: 20220129T080232+0000

Record Last Update: 20250421T053518+0000

Ratings and Alerts

No rating or validation information has been found for BrainStars.

No alerts have been found for BrainStars.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Micheli L, et al. (2021) Transcriptome Analysis in a Mouse Model of Premature Aging of Dentate Gyrus: Rescue of Alpha-Synuclein Deficit by Virus-Driven Expression or by Running Restores the Defective Neurogenesis. Frontiers in cell and developmental biology, 9, 696684.

Mucignat-Caretta C, et al. (2020) Protein Kinase A Catalytic and Regulatory Subunits Interact Differently in Various Areas of Mouse Brain. International journal of molecular sciences, 21(9).

Majer A, et al. (2019) The cell type resolved mouse transcriptome in neuron-enriched brain tissues from the hippocampus and cerebellum during prion disease. Scientific reports, 9(1), 1099.

Ehrlich AT, et al. (2018) Expression map of 78 brain-expressed mouse orphan GPCRs provides a translational resource for neuropsychiatric research. Communications biology, 1, 102.

Tratnjek L, et al. (2017) Synaptotagmin 7 and SYNCRIP proteins are ubiquitously expressed in the rat brain and co-localize in Purkinje neurons. Journal of chemical neuroanatomy, 79, 12.

Szabolcsi V, et al. (2017) Parvalbumin-Neurons of the Ventrolateral Hypothalamic Parvafox Nucleus Receive a Glycinergic Input: A Gene-Microarray Study. Frontiers in molecular neuroscience, 10, 8.

Zilkha-Falb R, et al. (2017) Prickle1 as positive regulator of oligodendrocyte differentiation. Neuroscience, 364, 107.

Victorio CB, et al. (2016) A clinically authentic mouse model of enterovirus 71 (EV-A71)-induced neurogenic pulmonary oedema. Scientific reports, 6, 28876.

Grunin M, et al. (2016) Transcriptome Analysis on Monocytes from Patients with Neovascular Age-Related Macular Degeneration. Scientific reports, 6, 29046.

Satoh A, et al. (2015) Deficiency of Prdm13, a dorsomedial hypothalamus-enriched gene, mimics age-associated changes in sleep quality and adiposity. Aging cell, 14(2), 209.

Malik AR, et al. (2015) Matricellular proteins of the Cyr61/CTGF/NOV (CCN) family and the nervous system. Frontiers in cellular neuroscience, 9, 237.

Hamada Y, et al. (2013) Circadian expression and specific localization of a sialyltransferase gene in the suprachiasmatic nucleus. Neuroscience letters, 535, 12.

Okamura-Oho Y, et al. (2012) Transcriptome tomography for brain analysis in the web-accessible anatomical space. PloS one, 7(9), e45373.

Kasukawa T, et al. (2011) Quantitative expression profile of distinct functional regions in the adult mouse brain. PloS one, 6(8), e23228.