# **Resource Summary Report**

Generated by dkNET on Apr 18, 2025

## Allen Brain Atlas API

RRID:SCR\_005984

Type: Tool

## **Proper Citation**

Allen Brain Atlas API (RRID:SCR\_005984)

#### Resource Information

**URL:** http://www.brain-map.org/api/index.html

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**Description:** API and demo application for accessing the Allen Brain Atlas Mouse Brain data. Data available via the API includes download high resolution images, expression data from a 3D volume, 3D coordinates of the Allen Reference Atlas, and searching genes with similar gene expression profiles using NeuroBlast. Data made available includes: \* High resolution images for gene expression, connectivity, and histology experiments, as well as annotated atlas images \* 3-D expression summaries registered to a reference space for the Mouse Brain and Developing Mouse Brain \* Primary microarray results for the Human Brain and Non-Human Primate \* RNA sequencing results for the Developing Human Brain \* MRI and DTI files for Human Brain The API consists of the following resources: \* RESTful model access \* Image download service \* 3-D expression summary download service \* Differential expression search services \* NeuroBlast correlative searches \* Image-to-image synchronization service \* Structure graph download service

Abbreviations: Allen Brain Atlas API

**Resource Type:** software application, software resource, portal, source code, topical portal, data or information resource

**Keywords:** atlas application, expression data, 3d volume, 3d coordinate, gene, reference atlas, connectivity, histology, microarray, brain, rna sequencing, mri, dti, api, computational neuroscience, mouse brain, neuroanatomy, neuroimaging, neuroinformatics, ish, high resolution image, nissl, annotation, atlas, image, web service, neuroblast, gene expression, gene, computational neuroscience, mouse brain, neuroanatomy, neuroimaging, neuroinformatics

### **Funding:**

Availability: Other/Commercial license License

Resource Name: Allen Brain Atlas API

Resource ID: SCR\_005984

Alternate IDs: nlx\_151358

Alternate URLs: http://www.nitrc.org/projects/incf\_allen-brai

**Record Creation Time:** 20220129T080233+0000

Record Last Update: 20250418T055120+0000

## **Ratings and Alerts**

No rating or validation information has been found for Allen Brain Atlas API.

No alerts have been found for Allen Brain Atlas API.

#### Data and Source Information

Source: SciCrunch Registry

## **Usage and Citation Metrics**

We found 13 mentions in open access literature.

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

Keshavarzi S, et al. (2022) Multisensory coding of angular head velocity in the retrosplenial cortex. Neuron, 110(3), 532.

Everlien I, et al. (2022) Diazepam binding inhibitor governs neurogenesis of excitatory and inhibitory neurons during embryonic development via GABA signaling. Neuron, 110(19), 3139.

Fleck JS, et al. (2021) Resolving organoid brain region identities by mapping single-cell genomic data to reference atlases. Cell stem cell, 28(6), 1148.

Sans-Dublanc A, et al. (2021) Optogenetic fUSI for brain-wide mapping of neural activity mediating collicular-dependent behaviors. Neuron, 109(11), 1888.

Bubier JA, et al. (2020) Discovery of a Role for Rab3b in Habituation and Cocaine Induced

Locomotor Activation in Mice Using Heterogeneous Functional Genomic Analysis. Frontiers in neuroscience, 14, 721.

Attili SM, et al. (2019) Cell numbers, distribution, shape, and regional variation throughout the murine hippocampal formation from the adult brain Allen Reference Atlas. Brain structure & function, 224(8), 2883.

Kalmbach BE, et al. (2018) h-Channels Contribute to Divergent Intrinsic Membrane Properties of Supragranular Pyramidal Neurons in Human versus Mouse Cerebral Cortex. Neuron, 100(5), 1194.

Cai L, et al. (2018) Neuronal Activities in the Mouse Visual Cortex Predict Patterns of Sensory Stimuli. Neuroinformatics, 16(3-4), 473.

Hunnicutt BJ, et al. (2016) A comprehensive excitatory input map of the striatum reveals novel functional organization. eLife, 5.

Ramsden HL, et al. (2015) Laminar and dorsoventral molecular organization of the medial entorhinal cortex revealed by large-scale anatomical analysis of gene expression. PLoS computational biology, 11(1), e1004032.

Forrest MD, et al. (2015) Simulation of alcohol action upon a detailed Purkinje neuron model and a simpler surrogate model that runs >400 times faster. BMC neuroscience, 16, 27.

Zaldivar A, et al. (2014) Allen Brain Atlas-Driven Visualizations: a web-based gene expression energy visualization tool. Frontiers in neuroinformatics, 8, 51.

Vied CM, et al. (2014) A multi-resource data integration approach: identification of candidate genes regulating cell proliferation during neocortical development. Frontiers in neuroscience, 8, 257.