# **Resource Summary Report**

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# Mouse Brain Atlases

RRID:SCR\_007127 Type: Tool

# **Proper Citation**

Mouse Brain Atlases (RRID:SCR\_007127)

## **Resource Information**

URL: http://www.mbl.org/mbl\_main/atlas.html

#### Proper Citation: Mouse Brain Atlases (RRID:SCR\_007127)

Description: High-resolution electronic atlases for mouse strains c57bl/6j, a/j, and dba/2j in either coronal or horizontal section. About this Atlas: The anterior-posterior coordinates are taken from an excellent print atlas of a C57BL/6J brain by K. Franklin and G. Paxinos (The Mouse Brain in Stereotaxic Coordinates, Academic Press, San Diego, 1997, ISBN Number 0-12-26607-6; Library of Congress: QL937.F72). The abbreviations we have used to label the sections conform to those in the Franklin-Paxinos atlas. A C57BL/6J mouse brain may contain as many as 75 million neurons, 23 million glial cells, 7 million endothelial cells associated with blood vessels, and 3 to 4 million miscellaneous pial, ependymal, and choroid plexus cells (see data analysis in Williams, 2000). We have not yet counted total cell number in DBA/2J mice, but the counts are probably appreciably lower. The brain and sections were all processed as described in our methods section. The enlarged images have a pixel count of 1865 x 1400 and the resolution is 4.5 microns/pixel for the processed sections. Plans: In the next several years we hope to add several additional atlases of the same sort for other strains of mice. A horizontal C57BL/6J atlas and a DBA/2J coronal atlas were completed by Tony Capra, summer 2000, and additional atlases may be made over the next several years. As describe in the MBL Procedures Section is not hard to make your own strain-specific atlas from the high resolution images in the MBL.

#### Abbreviations: Mouse Brain Atlases

Resource Type: data or information resource, atlas

**Keywords:** genetics, anatomy, coronal, cerebellum, c57bl/6j, dba/2j, a/j, horizontal, morphology, subcortical, volume

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Resource Name: Mouse Brain Atlases

Resource ID: SCR\_007127

Alternate IDs: nif-0000-00044

Record Creation Time: 20220129T080240+0000

Record Last Update: 20250519T204718+0000

# **Ratings and Alerts**

No rating or validation information has been found for Mouse Brain Atlases.

No alerts have been found for Mouse Brain Atlases.

## Data and Source Information

Source: <u>SciCrunch Registry</u>

## **Usage and Citation Metrics**

We found 7 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Groleau M, et al. (2020) Mesoscopic cortical network reorganization during recovery of optic nerve injury in GCaMP6s mice. Scientific reports, 10(1), 21472.

Luck R, et al. (2019) VEGF/VEGFR2 signaling regulates hippocampal axon branching during development. eLife, 8.

Mouro FM, et al. (2018) Chronic, intermittent treatment with a cannabinoid receptor agonist impairs recognition memory and brain network functional connectivity. Journal of neurochemistry, 147(1), 71.

Stratford JM, et al. (2017) Immunocytochemical organization and sour taste activation in the rostral nucleus of the solitary tract of mice. The Journal of comparative neurology, 525(2), 271.

Campus P, et al. (2016) Altered consolidation of extinction-like inhibitory learning in

genotype-specific dysfunctional coping fostered by chronic stress in mice. Behavioural brain research, 315, 23.

Zaslavsky I, et al. (2014) Cyberinfrastructure for the digital brain: spatial standards for integrating rodent brain atlases. Frontiers in neuroinformatics, 8, 74.

Ramani M, et al. (2013) Neurodevelopmental impairment following neonatal hyperoxia in the mouse. Neurobiology of disease, 50, 69.