Resource Summary Report

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Allen Mouse Brain Connectivity Atlas

RRID:SCR_008848
Type: Tool

Proper Citation

Allen Mouse Brain Connectivity Atlas (RRID:SCR_008848)

Resource Information

URL: http://connectivity.brain-map.org/

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Description: Map of neural connections in mouse brain, built on an array of transgenic mice genetically engineered to target specific cell types. In addition to the connectivity data, information about the transgenic mouse lines and genetic tracers is available. Consists of high resolution 2-D projectivity image data that can be viewed side-by-side with the associated reference atlas and other reference datasets. Enables 3-D visualization and spatial/ontological search of connectivity models through a combination of manual and informatics analyses.

Abbreviations: ABA Mouse Connectivity

Synonyms: Allen Brain Atlas Connectivity Study, Allen Brain Mouse Connectivity, Allen Mouse Connectivity Atlas, Allen Brain Atlas Mouse Connectivity

Resource Type: spatially referenced dataset, data or information resource, atlas

Keywords: brain, connectivity, atlas, neural, projection, mutant, mouse, strain, image, histology, neuroimaging, data

Funding: Allen Institute for Brain Science

Availability: Free for academic use, Non-commercial, Acknowledgement required, Commercial use requires permission

Resource Name: Allen Mouse Brain Connectivity Atlas

Resource ID: SCR_008848

Alternate IDs: nlx_146253

Alternate URLs: http://connectivity.brain-map.org/static/brainexplorer

Record Creation Time: 20220129T080249+0000

Record Last Update: 20250423T060502+0000

Ratings and Alerts

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

No alerts have been found for Allen Mouse Brain Connectivity Atlas.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 135 mentions in open access literature.

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

Milisav F, et al. (2025) A simulated annealing algorithm for randomizing weighted networks. Nature computational science, 5(1), 48.

Barraclough BN, et al. (2024) Direct comparison of Hoxb8-driven reporter distribution in the brains of four transgenic mouse lines: towards a spinofugal projection atlas. Frontiers in neuroanatomy, 18, 1400015.

van Hout ATB, et al. (2024) Comparing mouse and human cingulate cortex organization using functional connectivity. Brain structure & function, 229(8), 1913.

Suárez LE, et al. (2024) Connectome-based reservoir computing with the conn2res toolbox. Nature communications, 15(1), 656.

Hira R, et al. (2024) Mesoscale functional architecture in medial posterior parietal cortex. bioRxiv : the preprint server for biology.

Fei Y, et al. (2024) Diverse and asymmetric patterns of single-neuron projectome in regulating interhemispheric connectivity. Nature communications, 15(1), 3403.

Rvachev MM, et al. (2024) An operating principle of the cerebral cortex, and a cellular

mechanism for attentional trial-and-error pattern learning and useful classification extraction. Frontiers in neural circuits, 18, 1280604.

Wang Y, et al. (2024) Brain topology improved spiking neural network for efficient reinforcement learning of continuous control. Frontiers in neuroscience, 18, 1325062.

Øvsthus M, et al. (2024) Spatially integrated cortico-subcortical tracing data for analyses of rodent brain topographical organization. Scientific data, 11(1), 1214.

Peng B, et al. (2024) Cross-modal enhancement of defensive behavior via parabigemino-collicular projections. Current biology : CB, 34(16), 3616.

Reiten I, et al. (2023) The efferent connections of the orbitofrontal, posterior parietal, and insular cortex of the rat brain. Scientific data, 10(1), 645.

Grosu GF, et al. (2023) The fractal brain: scale-invariance in structure and dynamics. Cerebral cortex (New York, N.Y. : 1991), 33(8), 4574.

Papale AE, et al. (2023) Symmetry in frontal but not motor and somatosensory corticocortical and corticostriatal circuitry. bioRxiv : the preprint server for biology.

Liang Z, et al. (2023) Using mesoscopic tract-tracing data to guide the estimation of fiber orientation distributions in the mouse brain from diffusion MRI. NeuroImage, 270, 119999.

Rajan A, et al. (2023) Low-level repressive histone marks fine-tune gene transcription in neural stem cells. eLife, 12.

Jhang J, et al. (2023) A top-down slow breathing circuit that alleviates negative affect. bioRxiv : the preprint server for biology.

Xiao C, et al. (2023) Glutamatergic and GABAergic neurons in pontine central gray mediate opposing valence-specific behaviors through a global network. Neuron, 111(9), 1486.

Tocco C, et al. (2022) The topography of corticopontine projections is controlled by postmitotic expression of the area-mapping gene Nr2f1. Development (Cambridge, England), 149(5).

Shi J, et al. (2022) MouseNet: A biologically constrained convolutional neural network model for the mouse visual cortex. PLoS computational biology, 18(9), e1010427.

Singh S, et al. (2022) An inhibitory circuit from central amygdala to zona incerta drives pain-related behaviors in mice. eLife, 11.