Resource Summary Report

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Early Postnatal Developmental Mouse Brain Atlas

RRID:SCR_024725
Type: Tool

Proper Citation

Early Postnatal Developmental Mouse Brain Atlas (RRID:SCR_024725)

Resource Information

URL: https://kimlab.io/brain-map/epDevAtlas/

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Description: Suite of open access resources including 3D atlases of early postnatally developing mouse brain and mapped cell type density growth charts, which can be used as standalone resources or to implement data integration. Web platform can be utilized to analyze and visualize the spatiotemporal growth of GABAergic, microglial, and cortical layer-specific cell type densities in 3D. Morphologically averaged symmetric template brains serve as the basis reference space and coordinate system with an isotropic resolution of 20 ?m (XYZ in coronal plane). Average transformations were conducted at 20 ?m voxel resolution by interpolating high resolution serial two photon tomography images from primarily Vip-IRES-Cre;Ai14 mice at postnatal (P) ages P4, P6, P8, P10, P12, and P14. For all ages, anatomical labels from the P56 Allen Mouse Brain Common Coordinate Framework (Allen CCFv3) were iteratively down registered to each early postnatal time point in a non-linear manner, aided by manual parcellations of landmarks in 3D, consistent with the Allen Mouse Reference Atlas Ontology.

Abbreviations: epDevAtlas

Resource Type: data or information resource, laboratory portal, atlas, organization portal, portal

Defining Citation: DOI:10.1101/2023.11.24.568585

Keywords: 3D atlases, early postnatally developing mouse brain, mapped cell type density growth charts, Allen Mouse Reference Atlas Ontology,

Funding: NIMH RF1MH12460501;

NINDS R01NS108407

Availability: Free, Freely available

Resource Name: Early Postnatal Developmental Mouse Brain Atlas

Resource ID: SCR_024725

Record Creation Time: 20231128T050245+0000

Record Last Update: 20250416T064014+0000

Ratings and Alerts

No rating or validation information has been found for Early Postnatal Developmental Mouse Brain Atlas.

No alerts have been found for Early Postnatal Developmental Mouse Brain Atlas.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Zucca S, et al. (2024) Developmental encoding of natural sounds in the mouse auditory cortex. Cerebral cortex (New York, N.Y. : 1991), 34(11).

Liwang JK, et al. (2023) epDevAtlas: Mapping GABAergic cells and microglia in postnatal mouse brains. bioRxiv : the preprint server for biology.