

Resource Summary Report

Generated by [NIF](#) on May 14, 2025

Neocortical Microcircuit Database

RRID:SCR_002415

Type: Tool

Proper Citation

Neocortical Microcircuit Database (RRID:SCR_002415)

Resource Information

URL: <http://microcircuit.epfl.ch/>

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Description: THIS RESOURCE IS NO LONGER IN SERVICE, documented on April 26, 2011. Neurons are characterized in terms of their morphological, physiological and gene expression profiles. Synaptic connections are characterized in terms of their physiological and anatomical profiles. Neuron morphology profiles are obtained from detailed morphometric breakdown of 3D reconstructed neurons (m-Profiles), neuron physiology profiles are obtained from detailed measurement of the electrophysiological responses to a series of stimulus protocols (e-Profiles), and neuron gene expression profiles are obtained from single cell RT-PCR data (g-Profiles) and in the near future from gene-chips. Synaptic connections are characterized by the identity of the pre and postsynaptic neurons (sn-Profile), the anatomy of synaptic connections as characterized by the axonal and dendritic location of light microscopically identified putative synapses (sm-Profile), and the physiology of synaptic connections as characterized by a profile of electrophysiological parameters obtained from a series of stimulation protocols applied to the presynaptic neuron (se-Profile).

Abbreviations: NMDB

Resource Type: data or information resource, database

Defining Citation: [PMID:15923726](#)

Keywords: electrophysiologythis site will provide a major resource for those interested in cortical microcircuitry once it is complete. it currently has almost 300 neuronal reconstructions and 176 connections mapped., gene expression, 3d reconstruction, analysis tools, connectivity, cortical neuron, intracellular injection, intracellular recording, microcircuit, microcircuitry, microscopy, neurolucida, neuron morphology, rat, synaptic connectivity

Funding:

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: Neocortical Microcircuit Database

Resource ID: SCR_002415

Alternate IDs: nif-0000-00124

Record Creation Time: 20220129T080213+0000

Record Last Update: 20250507T060048+0000

Ratings and Alerts

No rating or validation information has been found for Neocortical Microcircuit Database.

No alerts have been found for Neocortical Microcircuit Database.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.