Resource Summary Report

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NeuroMab

RRID:SCR_003086
Type: Tool

Proper Citation

NeuroMab (RRID:SCR_003086)

Resource Information

URL: http://neuromab.ucdavis.edu/

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Description: A national mouse monoclonal antibody generating resource for biochemical and immunohistochemical applications in mammalian brain. NeuroMabs are generated from mice immunized with synthetic and recombinant immunogens corresponding to components of the neuronal proteome as predicted from genomic and other large-scale cloning efforts. Comprehensive biochemical and immunohistochemical analyses of human, primate and non-primate mammalian brain are incorporated into the initial NeuroMab screening procedure. This yields a subset of mouse mAbs that are optimized for use in brain (i.e. NeuroMabs): for immunocytochemical-based imaging studies of protein localization in adult, developing and pathological brain samples, for biochemical analyses of subunit composition and post-translational modifications of native brain proteins, and for proteomic analyses of native brain protein networks. The NeuroMab facility was initially funded with a five-year U24 cooperative grant from NINDS and NIMH. The initial goal of the facility for this funding period is to generate a library of novel NeuroMabs against neuronal proteins, initially focusing on membrane proteins (receptors/channels/transporters), synaptic proteins, other neuronal signaling molecules, and proteins with established links to disease states. The scope of the facility was expanded with supplements from the NIH Blueprint for Neuroscience Research to include neurodevelopmental targets, the NIH Roadmap for Medical Research to include epigenetics targets, and NIH Office of Rare Diseases Research to include rare disease targets. These NeuroMabs will then be produced on a large scale and made available to the neuroscience research community on an inexpensive basis as tissue culture supernatants or purified immunoglobulin by Antibodies Inc. The UC Davis/NIH NeuroMab Facility makes NeuroMabs available directly to end users and is unable to accommodate sales to distributors for third party distribution. Note, NeuroMab antibodies are now offered through antibodiesinc.

Abbreviations: NeuroMab

Synonyms: UCDavis/NIH NeuroMab Facility, antibodies.inc, antibodiesinc.com, antibodiesinc

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

Keywords: antibody, brain, channel, disease-related protein, k channel subunit, mab, mammalian, membrane protein, monoclonal antibody, mouse, neuronal monoclonal antibody, neuronal protein, neuronal signaling molecule, reagent, receptor, research reagent, synaptic protein, transporter

Funding: NINDS ;
NIMH ;
NIH Blueprint for Neuroscience Research ;
NIH Roadmap for Medical Research ;
Office of Rare Diseases Research ;
Antibodies Inc.

Resource Name: NeuroMab

Resource ID: SCR_003086

Alternate IDs: grid.482686.6, nif-0000-00175

Alternate URLs: https://ror.org/00fyrp007

Record Creation Time: 20220129T080217+0000

Record Last Update: 20250426T055609+0000

Ratings and Alerts

No rating or validation information has been found for NeuroMab.

No alerts have been found for NeuroMab.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 1719 mentions in open access literature.

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

Lin S, et al. (2025) Interneuron FGF13 regulates seizure susceptibility via a sodium channel-independent mechanism. eLife, 13.

Marcassa G, et al. (2025) Synaptic signatures and disease vulnerabilities of layer 5 pyramidal neurons. Nature communications, 16(1), 228.

Vinci E, et al. (2025) Regulation of Dendrite and Dendritic Spine Formation by TCF20. Journal of neurochemistry, 169(1), e16297.

Espino CM, et al. (2025) Differential encoding of mammalian proprioception by voltage-gated sodium channels. Science advances, 11(2), eads6660.

Kerdiles O, et al. (2025) Additive neurorestorative effects of exercise and docosahexaenoic acid intake in a mouse model of Parkinson's disease. Neural regeneration research, 20(2), 574.

Matsuki T, et al. (2025) The MCPH7 Gene Product STIL Is Essential for Dendritic Spine Formation. Cells, 14(2).

Gabriel GC, et al. (2025) Mitotic block and epigenetic repression underlie neurodevelopmental defects and neurobehavioral deficits in congenital heart disease. Nature communications, 16(1), 469.

Rubino E, et al. (2025) Exome sequencing reveals a rare damaging variant in GRIN2C in familial late-onset Alzheimer's disease. Alzheimer's research & therapy, 17(1), 21.

Sandal P, et al. (2025) De novo missense variants in the PP2A regulatory subunit PPP2R2B in a neurodevelopmental syndrome: potential links to mitochondrial dynamics and spinocerebellar ataxias. Human molecular genetics, 34(2), 193.

Mahmoudian M, et al. (2025) Cell Membrane-Integrated Neuroligin-1 Regulates the Anti-Inflammatory Effects of CRC Cell-Derived Exosomes. International journal of molecular sciences, 26(2).

Sun SY, et al. (2025) The interaction between KIF21A and KANK1 regulates dendritic morphology and synapse plasticity in neurons. Neural regeneration research, 20(1), 209.

Barón-Mendoza I, et al. (2025) Single-nucleotide polymorphism analysis accurately predicts multiple impairments in hippocampal activity and memory performance in a murine model of idiopathic autism. Scientific reports, 15(1), 749.

Lovatt C, et al. (2025) Memory engram synapse 3D molecular architecture visualized by cryoCLEM-guided cryoET. bioRxiv : the preprint server for biology.

Bullmann T, et al. (2024) Human iPSC-Derived Neurons with Reliable Synapses and Large Presynaptic Action Potentials. The Journal of neuroscience : the official journal of the Society

for Neuroscience, 44(24).

Zhao M, et al. (2024) Coxiella burnetii effector CvpE maintains biogenesis of Coxiella-containing vacuoles by suppressing lysosome tubulation through binding PI(3)P and perturbing PIKfyve activity on lysosomes. Virulence, 15(1), 2350893.

Wojtas MN, et al. (2024) Interplay between hippocampal TACR3 and systemic testosterone in regulating anxiety-associated synaptic plasticity. Molecular psychiatry, 29(3), 686.

Lin S, et al. (2024) Interneuron FGF13 regulates seizure susceptibility via a sodium channel-independent mechanism. bioRxiv : the preprint server for biology.

Matúš D, et al. (2024) Essential Role of Latrophilin-1 Adhesion GPCR Nanoclusters in Inhibitory Synapses. The Journal of neuroscience : the official journal of the Society for Neuroscience, 44(23).

Jiang WR, et al. (2024) A circRNA ceRNA network involved in cognitive dysfunction after chronic cerebral hypoperfusion. Aging, 16(2), 1161.

Takagishi M, et al. (2024) Motor protein Kif6 regulates cilia motility and polarity in brain ependymal cells. Disease models & mechanisms, 17(2).