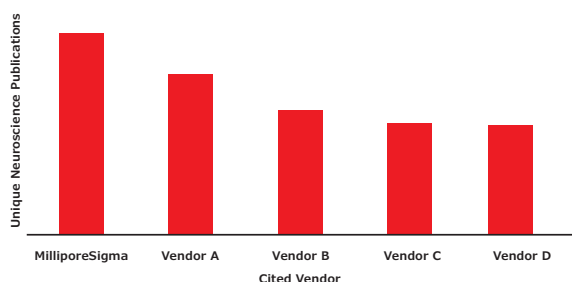


The Most Cited Antibodies in Neuroscience

When you think Neuroscience, you think of us

Neuroscience is a heterogeneous field, requiring an integrated analysis of multiple cell types, tissues and organs, using diverse techniques. The next advance in neuroscience will likely rely on antibodies and immunodetection, given that researchers tend to build upon traditional technologies, rather than abandon them. By integrating the antibody expertise and resources of Calbiochem®, Chemicon®, and Upstate®, we are now the most cited provider of neuroscience antibodies. Our vast neuroscience portfolio includes pathway-, cell type-, and state-specific antibodies and neurological disease assays and markers.

NEUROSCIENCE CITATION PREVALENCE

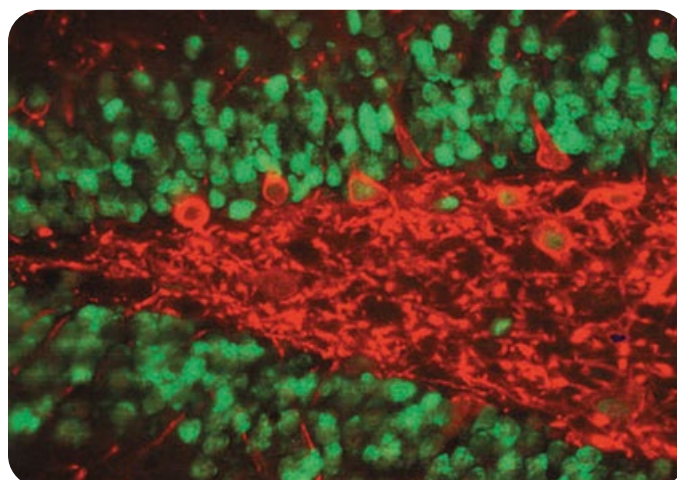


We are committed to continually supporting you and your colleagues to get the job done and the data published. CiteAb is a high-quality data provider, supplying the largest database of reagent citations in life science. Accordingly, we are the number one cited supplier for neuroscience antibodies, including the number one cited supplier for the most highly cited targets described here.

RNA binding protein fox-1 homolog 3 (NeuN)

NeuN antibody (NEUronal Nuclei; clone A60) specifically recognizes the DNA-binding, neuron-specific protein NeuN, which is present in most central nervous system (CNS) and peripheral nervous system (PNS) neuronal cell types of all vertebrates tested. Immunohistochemically detectable NeuN protein first appears at developmental time points that correspond with the withdrawal of the neuron from the cell cycle and/or with the initiation of terminal differentiation of the neuron (Mullen et al., 1992).

Cat. No.	Product Description	Citation Rank for Target
MAB377	Anti-NeuN Antibody, clone A60	1st
ABN78	Anti-NeuN Antibody (rabbit)	4th
MAB377X	Anti-NeuN Antibody, clone A60, Alexa Fluor®488 conjugated	5th



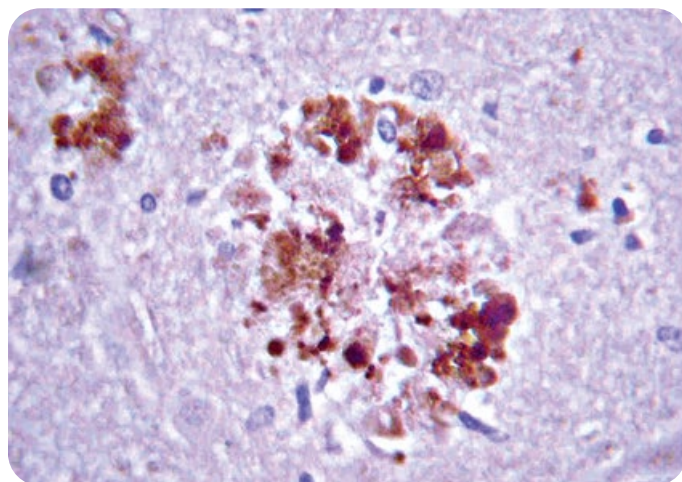
Mouse anti-NeuN (Cat. No. MAB377) and Rabbit anti-Substance P Receptor (Cat. No. AB5060) staining of normal rat hippocampus. NeuN immunoreactivity in green and Substance P Receptor immunoreactivity in red. Photo courtesy of Dr. Robert Sloviter, University of Arizona.



Amyloid-beta precursor protein (APP)

The cerebral and vascular plaques associated with Alzheimer's disease (AD) are mainly composed of amyloid-beta peptides (A β). A β is derived from cleavage of the amyloid precursor protein (APP) and varies in length from 39 to 43 amino acids. A β [1-40], A β [1-42], and A β [1-43] peptides result from cleavage of APP after residues 40, 42, and 43, respectively. The cleavage takes place by gamma-secretase during the last APP processing step. A β [1-40], [1-42], and [1-43] peptides are major constituents of the plaques and tangles that occur in AD. A β antibodies and peptides have been developed as tools for elucidating the biology of AD.

Cat. No.	Product Description	Citation Rank for Target
MAB348	Anti-APP A4 Antibody, a.a. 66-81 of APP {NT}, clone 22C11	1st
A8717	Anti-Amyloid Precursor Protein, C-Terminal antibody produced in rabbit	2nd

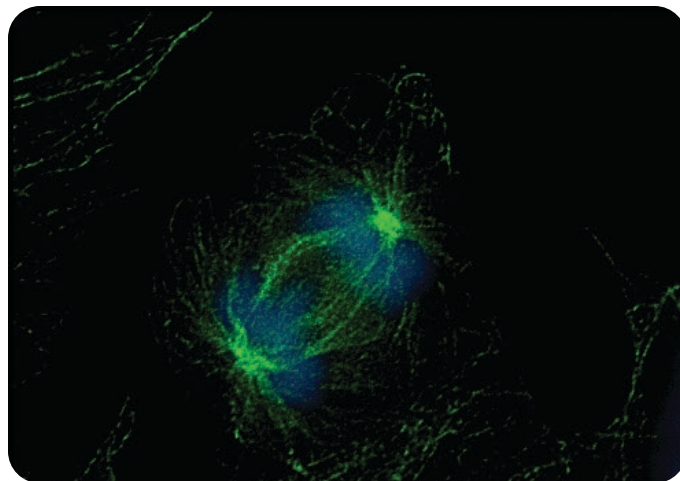


Amyloid (β -A4-protein, **Cat. No. MAB348**) staining on Alzheimer's Disease-Hypothalamus. Tissue pretreated with Citrate, pH 6.0. Monoclonal Ab. diluted to 1:80, IHC-Select Detection with HRP-DAB. Immunoreactivity is seen as staining on plaque deposits (dark brown). High mag.

Tubulin alpha-4A chain

α -tubulin, also called tubulin α 4a (TUBA4A), is mapped to human chromosome 2q35. The gene codes for a member of the α -tubulin family, and contains 448 amino acids. TUBA4A belongs to the subfamily of tubulin, which is the major building block of microtubules.

Cat. No.	Product Description	Citation Rank for Target
T9026	Monoclonal Anti- α -Tubulin	1st
T5168	Monoclonal Anti- α -Tubulin	2nd
T6199	Anti- α -Tubulin	3rd
T6793	Monoclonal Anti-Tubulin, Acetylated	4th
T6074	Monoclonal Anti- α -Tubulin	5th

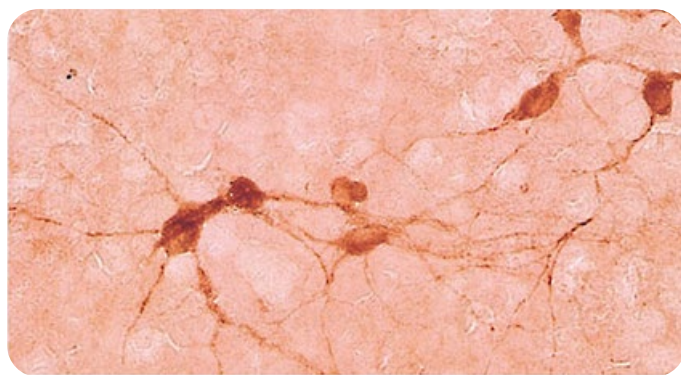


Chinese hamster embryonic fibroblasts in anaphase of mitosis were stained using Monoclonal Anti- α -Tubulin, clone no. DM1A (**Cat. No. T9026**) with Anti-Mouse-Alexa 488 (green) and DAPI (blue). From Thomas Durcan, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN.

Choline O-acetyltransferase (ChAT)

Acetylcholine (ACh) is a common neurotransmitter for motor neurons, preganglionic autonomic neurons, postganglionic parasympathetic neurons, a variety of brain regions and some emerging neuron-like stem cells. The metabolism of ACh is relatively simple, involving only two enzymes: choline acetyltransferase (ChAT) for synthesis and acetylcholinesterase (AChE) for degradation. It seems that only cholinergic neurons have significant amounts of ChAT making anti-choline acetyltransferase a useful specific marker.

Cat. No.	Product Description	Citation Rank for Target
AB144P	Anti-Choline Acetyltransferase	1st
AB144	Anti-Choline Acetyltransferase	2nd
AB143	Anti-Choline Acetyltransferase	3rd
AB144P1ML	Anti-Choline Acetyltransferase	4th



Goat anti-ChAT (**Cat. No. AB144P**) staining of organotypic slice cultures of septum from 7-day-old rat tissue maintained in culture for 8 days.

Award-Winning ZooMAb® Recombinant Monoclonal Antibodies

Our ZooMAb® recombinant monoclonal antibodies were awarded the 2020 Innovative Product of the Year by CiteAb, a leading life science data provider for citations and market data. ZooMAb® recombinant antibodies represent a paradigm change in traditional antibody vendor supply by providing the first-in-class performance you expect from a recombinant antibody, with an accessible, uniform, researcher-friendly platform. With ZooMAb® antibodies, the feature-loaded platform stays the same from Actin to ZFP: all recombinant, all lyophilized, all stable, all pure, and more. With a continually growing list of new ZooMAb® antibodies, we've produced ZooMAb® antibodies against numerous highly published targets in neurology and neurobiology enabling researchers to obtain the same robust data time and time again.



Cat. No.	Product Description
ZRB1640	Anti-RPE65 Antibody, clone 2F8 ZooMAb® Rabbit Monoclonal
ZRB1468	Anti-PIEZO2 Antibody, clone 1H10 ZooMAb® Rabbit Monoclonal
ZRB1448	Anti-Recoverin Antibody, clone 1K10 ZooMAb® Rabbit Monoclonal
ZRB1136	Anti-BDNF Antibody, clone 1I14 ZooMAb® Rabbit Monoclonal
ZRB2383	Anti-GFAP Antibody, clone 2E8, ZooMAb® Rabbit Monoclonal
ZRB1293	Anti-CACNA1C Antibody, clone 1F20 ZooMAb® Rabbit Monoclonal
ZRB2290	Anti-MAP2 Antibody, clone 3C19, ZooMAb® Rabbit Monoclonal
ZMS1025	Anti-Reelin Antibody, clone G10 ZooMAb® Mouse Monoclonal
ZRB1091	Anti-GAD65 Antibody, clone 3B23 ZooMAb® Rabbit Monoclonal
ZRB1256	Anti-α-Dystroglycan Antibody, clone 3O19-H1 ZooMAb® Rabbit Monoclonal
ZRB1257	Anti-PSD-95 Antibody, clone 2B20 ZooMAb® Rabbit Monoclonal
ZRB1090	Anti-GAD67 Antibody, clone 4B5 ZooMAb® Rabbit Monoclonal
ZMS1013	Anti-MAP2 Antibody, clone AP20 ZooMAb® Mouse Monoclonal
ZRB1317	Anti-Synaptophysin Antibody, clone 1G7, ZooMAb® Rabbit Monoclonal
ZMS1037	Anti-NG2 Antibody, clone 132.38 ZooMAb® Mouse Monoclonal

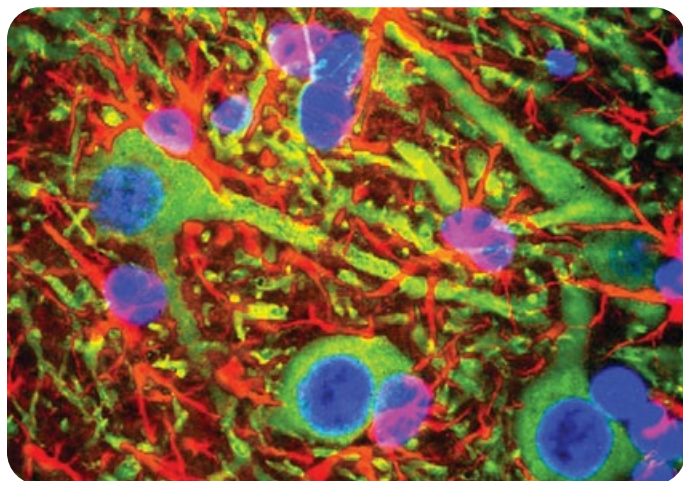
More of the top cited neuroscience antibodies

Cat. No.	Product Description
MAB3420	Anti-Tau-1, clone PC1C6
AB152	Anti-Tyrosine Hydroxylase
05-591	Anti-Akt/PKB, PH Domain, clone SKB1
MAB1596	Anti-Post Synaptic Density Protein 95, clone 6G6-1C9
MAB1501	Anti-Actin, clone C4
MAB3408	Anti-Tubulin, beta, clone KMX-1
AB2253	Anti-Doublecortin
MAB1637	Anti-Tubulin, beta III isoform, CT, clone TU-20 (Similar to TUJ1)
AB5038	Anti-Synuclein α
AB3080	Anti-Green Fluorescent Protein
MABS827	Anti-ERK1/2, clone 16A6.1
AB5622	Anti-Microtubule-Associated Protein 2 (MAP2)
MAB5266	Anti-Neurofilament 200 kDa, clone N52
MABN1193	Anti-Synaptophysin, clone 10F6.1
AB5603	Anti-SOX2
06-519	Anti-phospho-CREB (Ser133)
06-863	Anti-CREB
MAB353	Anti-Nestin, clone rat-401
MAB5326	Anti-Nestin, clone 10C2
AB5905	Anti-Vesicular Glutamate Transporter 1
MAB5502	Anti-Vesicular Glutamate Transporter 1
05-419	Anti-Myc Tag, clone 9E10
AB1504	Anti-Glutamate receptor 1
MAB2263	Anti-GluR1-NT (NT), clone RH95
05-643	Anti-phospho-GSK3β (Ser9), clone 2D3
06600	Anti-NR2B
AB1557P	Anti-NMDAR2B
AB9610	Anti-Olig-2
MABN50	Anti-Olig2, clone 211F1.1

Glial Fibrillary Acidic Protein (GFAP)

Cat. No.	Product Description	Citation Rank for Target
G3893	Anti-Glial Fibrillary Acidic Protein	2nd
MAB360	Anti-Glial Fibrillary Acidic Protein, clone GA5	3rd

Glial fibrillary acidic protein is a class-III intermediate filament. GFAP is the main constituent of intermediate filaments in astrocytes and serves as a cell-specific marker that distinguishes differentiated astrocytes from other glial cells during the development of the central nervous system.



Rabbit anti-MAP2 (**Cat. No. AB5622**). Immunolocalization of MAP2 (green) and GFAP (red) in rat hippocampus. The slide was mounted with Vectashield DAPI. Photo courtesy of Karl A. Kasischke & Patricia J. Fisher, Cornell University, Ithaca, NY.

Cat. No.	Product Description
AB1506	Anti-Glutamate Receptor 2 & 3
MAB397	Anti-Glutamate Receptor 2, extracellular, clone 6C4
AB5320	Anti-NG2 Chondroitin Sulfate Proteoglycan
MAB5384-I	Anti-NG2 Chondroitin Sulfate Proteoglycan
MABS196	Anti-mTOR, rabbit monoclonal
05-1592	Anti-mTOR, clone 21D8.2
AB1779SP	Anti-Brain Derived Neurotrophic Factor
AB9864	Anti-NMDAR1, rabbit monoclonal
MAB363	Anti-NMDAR1, clone 54.1
MAB5406	Anti-GAD67, clone 1G10.2
AB175	Anti-GABA

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