

# Verifi(Ab)le

## Neuroscience Antibodies

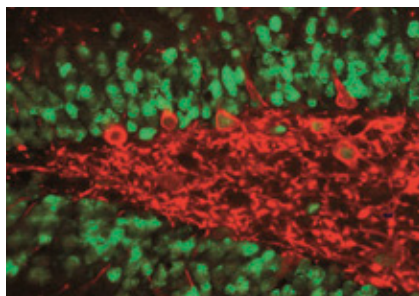
**Lot to lot. Experiment to experiment.  
Our Anti-Fail testing guidelines meet  
your most demanding expectations.**

Neuroscience is being transformed by advancements such as antibody-based biomarker detection reagents, highly specific and robust primary antibodies, and vastly improved immunodetection techniques. Recognizing the opportunities—and challenges—facing scientific research, EMD Millipore is continually developing and refining tools and technologies for the study of neuroscience. Researchers can count on our comprehensive portfolio of dependable, high-quality solutions for elucidating questions related to neuroscience.



**Validated Antibodies  
for Key Research Areas:**

- Cancer
- Cell Signaling
- Cell Structure
- ChIPAb+™/RIPAb+™
- Chromatin-Associated
- Epigenetics
- Neuroscience** ✓
- Stem Cell



Mouse anti-NeuN Ab, clone A60 (MAB377, green) and rabbit Anti-Substance P Receptor, pain (AB5060, red) staining of normal rat hippocampus.

# Primary Antibodies for Neuroscience Research

The basic principle that underlies all immunochemical techniques is that a specific antibody will combine with its target antigen to generate an exclusive antibody-antigen complex. The specificity of primary antibodies, ideally monoclonal antibodies, enables them to be used for the initial detection of the target of interest in the study of cellular pathways and mechanisms, be they native or disrupted by disease states.

Primary Antibody	Species Reactivity	Key Applications	Host	Format	Type	Cat. No.
Anti-APP A4, a.a. 66-81 of APP {NT}, clone 22C11	Ca, F, H, Mk, M, Po, R	IF, IH, IH(P), WB	M	Purified	Mono	MAB348
Anti-Choline Acetyltransferase	Av, Ch, Gp, H, Mk, M, Op, R, Zf	IC, IH, IH(P), WB	Gt	Affinity purified	Poly	AB144P
Anti-GAD67, clone 1G10.2	H, M, R	IH, IH(P), WB	M	Purified	Mono	MAB5406
Anti-Glial Fibrillary Acidic Protein (GFAP)	B, Ca, H, R	IC, IH, IH(P)	Rb	Serum	Poly	AB5804
Anti-Glial Fibrillary Acidic Protein, clone GA5	B, Ch, H, M, Po, R, Rb	IC, IH, IH(P), WB	M	Ascites	Mono	MAB360
Anti-Glial Fibrillary Acidic Protein, clone GA5	B, Ch, H, M, Po, R, Rb	IC, IH, IH(P), WB	M	Purified	Mono	MAB3402
Anti-Glutamate Receptor 2, extracellular, clone 6C4	Ca, Mk, M, R	ELISA, IC, IH, IP, RIA, WB	M	Purified	Mono	MAB397
Anti-Huntingtin Protein, a.a. 181-810, clone 1HU-4C8	Ht, H, Mk, M, R, Rb	ELISA, IC, IH(P), IP, WB	M	Ascites	Mono	MAB2166
Anti-Microtubule-Associated Protein 2 (MAP2)	H, M, R	ELISA, IC, IH, IH(P), WB	Rb	Purified	Poly	AB5622
Anti-Myc Tag, clone 4A6	H	ChIP-seq, IC, IF, IP, WB	M	Purified	Mono	05-724
Anti-NeuN, clone A60	Av, Ch, Ft, H, M, Po, R, Sal	FC, IC, IF, IH, IH(P), IP, WB	M	Purified	Mono	MAB377
Anti-NG2 Chondroitin Sulfate Proteoglycan	H, Mk, M, R	ELISA, IC, IH, IP, WB	Rb	Affinity purified	Poly	AB5320
Anti-O4, clone 81	Ch, H, M, R	IC, IH	M	Purified	Mono	MAB345
Anti-Olig-2	H, M, R	IC, IH, IH(P), IP, WB	Rb	Purified	Poly	AB9610
Anti-Polysialic Acid-NCAMs, clone 2-2B	H, M, R, Vrt	IC, IH, RIA, WB	M	Ascites	Mono	MAB5324
Anti-Sox2	H, M	IC, WB	Rb	Affinity purified	Poly	AB5603
Anti-Tau-1, clone PC1C6	B, H, R	IH, WB	M	Purified	Mono	MAB3420
Anti-Tubulin, beta III isoform, CT, clone TU-20 (Similar to TUJ1)	Av, B, H, Mk, M, Po, R, Sh	ELISA, IC, IH, IH(P), IP, WB	M	Ascites	Mono	MAB1637
Anti-Tyrosine Hydroxylase	Dr, Fe, Ft, H, Ml, M, R, Sqd	ELISA, IF, IH, IH(P), IP, WB	Rb	Affinity purified	Poly	AB152
Anti-Tyrosine Hydroxylase, clone LNC1	Ch, Fg, H, Lz, Mk, M, R, Vo, Zf	IH, IH(P), IP, WB	M	Ascites	Mono	MAB318

For a complete offering of antibodies for neuroscience research, please visit:  
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# Secondary Antibodies for Neuroscience Research

Secondary antibodies are often used to amplify the detection of an antigen that a primary antibody is first bound to. It is therefore important to select a secondary antibody that has specificity for the species and isotype of the primary antibody. In addition, the secondary antibody must be conjugated to a suitable tag or label for optimal detection.

Secondary Antibody	Species Reactivity	Key Applications	Host	Isotype	Conj.	Cat. No.
Anti-Green Fluorescent Protein	Vrt	ELISA, IC, IH, WB	Rb			AB3080
Anti-Myc Tag, clone 4A6	H	ChIP-seq, IC, IF, IP, WB	M	IgG		05-724
Anti-SBP-tag, clone 20	H	IC, WB	M	IgG <sub>1κ</sub>		MAB10764
Donkey Anti-Goat IgG, HRP conjugate, Species Adsorbed	Gt	ELISA, IH, WB	Dk	IgG	HRP	AP180P
Donkey Anti-Mouse IgG, FITC conjugate, Species Adsorbed	M	IF	Dk	IgG	FITC	AP192F
Donkey Anti-Mouse IgG, HRP conjugate, Species Adsorbed	M	ELISA, WB	Dk	IgG	HRP	AP192P
Donkey Anti-Rabbit IgG, HRP conjugate, Species Adsorbed	Rb	ELISA, WB	Dk	IgG	HRP	AP182P
Goat Anti-Human Ig κ chain, HRP conjugate, Species Adsorbed	H	ELISA	Gt	IgK	HRP	AP502P
Goat Anti-Human IgA, α-Chain Specific Alkaline Phosphatase Conjugate	H	EIA, IEP	Gt	IgA	Alk Phos	401132-1ML
Goat Anti-Human IgG, heavy and light chains	H	IP	Gt	IgG		AB22-2ML
Goat Anti-Mouse IgG, (H+L) FITC Conjugated	M	IF	Gt	IgG	FITC	AP124F
Goat Anti-Mouse IgG, Alkaline Phosphatase conjugate	M	ELISA, WB	Gt	IgG	Alk Phos	AP124A
Goat Anti-Mouse IgG, F(ab') <sub>2</sub> , FITC conjugate	M	IF	Gt	IgG	FITC	AQ303F
Goat Anti-Mouse IgG, HRP conjugate	M	ELISA, IH, WB	Gt	IgG	HRP	12-349
Goat Anti-Mouse IgG, HRP conjugate, Species Adsorbed	M	ELISA, WB	Gt	IgG	HRP	AP181P
Goat Anti-Mouse IgG, Peroxidase Conjugated, H+L	M	ELISA, IH, WB	Gt	IgG	HRP	AP124P
Goat Anti-Rabbit IgG, HRP-conjugate	Rb	ELISA, IH, WB	Gt	IgG	HRP	12-348
Goat Anti-Rabbit IgG, Peroxidase Conjugated	Rb	ELISA, IH, WB	Gt	IgG	HRP	AP132P
Goat Anti-Rabbit γ-Globulin	Rb	IEP, RIA	Gt	IgG		539844-125U
His•Tag® Monoclonal		IP, IL, WB		IgG1		70796-3
Mouse Anti-Human IgG, Fc, all subclasses, clone MK1A6	H	ELISA, IF, HI, IH	M	IgG1		CBL101
Normal Rabbit IgG		IP, WB	Rb	IgG		12-370
Rabbit Anti-Goat IgG, HRP conjugate	Gt	ELISA, IH, WB	Rb	IgG	HRP	AP106P
S•Tag™ Monoclonal		IB, IF, IP		IgG <sub>2b</sub>		71549-3

For a complete offering of antibodies for neuroscience research, please visit:

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# Small Molecules for Neuroscience Research

Chemical genetics, in which function is disrupted using small molecules, can shed light on specific disease state mechanisms. Small-molecule compounds, including inhibitors, activators, and other pathway modulators, are critical cellular transduction research tools.

Small Molecule Inhibitor or Activator	Cat. No.
AMPK Inhibitor, Compound C	171260
Ganglioside GQ1b, Tetrasialo, Tetraammonium Salt, Bovine Brain	345754
GSK-3 Inhibitor XVI	361559
InSolution™ $\gamma$ -Secretase Inhibitor X	565771
KN-93, Water-Soluble	422711
Lactacystin, Synthetic	426100
L- $\alpha$ -Lecithin, Soybean	429415
NFAT Inhibitor, Cell-Permeable	480401
Ru360	557440
$\beta$ -Secretase Inhibitor IV	565788

## LEGEND:

**Species:** A=all, Am=amphibian, Av=avian, B=bovine, Ca=canine, Ch=chicken, Chp=chimpanzee, Dk=donkey, Dr=drosophila, Eu=eukaryote, F=fish, Fe=feline, Fg=frog, Ft=ferret, Gp=guinea pig, Gt=goat, Ht=hamster, H=human, Lz=lizard, Ma=mammal, Mk=monkey, Ml=mollusk, M=mouse, Op=opossum, Pl=green plant, Pm=primate, Po=pig, R=rat, Rb=rabbit, RMk=Rhesus macaque, Sal=salamander, Sh=sheep, Sqd=squid, Su=sea urchin, T=tetrahymena, Vo=vole, Vrt=vertebrate, Xn=xenopus, Zf=zebrafish

**Applications:** CFA=cell function assay, ChIP=chromatin immunoprecipitation, ChIP-seq=chromatin immunoprecipitation sequencing, DB=dot blot, EIA=enzyme immunoassay, EMSA=electrophoretic mobility shift assay, FC=flow cytometry, FUNC=affects function, HI=hemagglutination inhibition, IAP=immunoaffinity purification, IB=immunoblotting, IC=immunocytochemistry, IEP=immunoelectrophoresis, IF=immunofluorescence, IH=immunohistochemistry, IH(P)=immunohistochemistry (paraffin), IL=immunolocalization, IP=immunoprecipitation, Mplex=multiplexing, NEUT=neutralizing, PIA=peptide inhibition assay, RIA=radioimmunoassay, RIP=RNA immunoprecipitation, WB=western blotting

**Format:** Alk Phos=alkaline phosphatase, CS=culture supernatant

**Type:** Mono=monoclonal antibody, Poly=polyclonal antibody

**Isotype:** IgA=immunoglobulin A, IgG=immunoglobulin G, IgK=immunoglobulin K

**Conjugation:** Alk Phos=alkaline phosphatase, FITC=fluorescein isothiocyanate, HRP=horseradish peroxidase



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