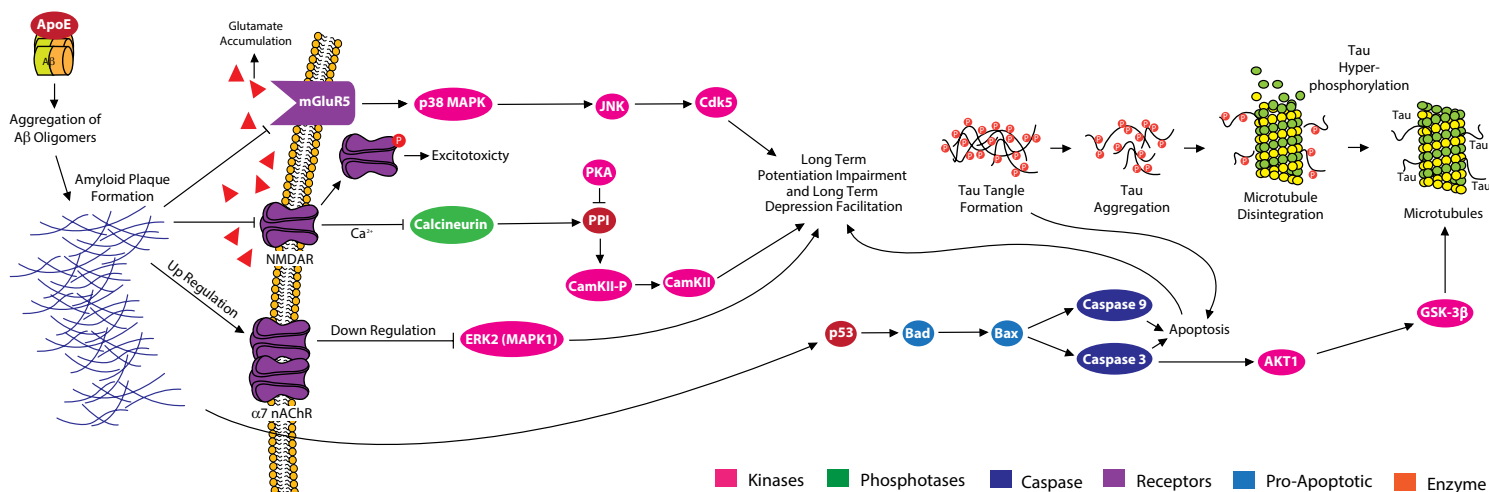


# NEURODEGENERATION RELATED ANTIBODIES

With more than 600 identified neurological diseases and an aging population, research is under way to understand the underlying causes and possible cures for these often devastating disorders. Neurodegenerative disorders due to faulty genes and diseases resulting in damage to nerve cells include Alzheimer's Disease, ALS, Huntington's Disease, Multiple Sclerosis, and Parkinson's Disease. Recent research also points to the role of neuroinflammation and neuroimmune response in prevalent neurological diseases. Studies have shown that changes in cytokines, lymphocytes, and some epigenetic mechanisms affect CNS processes and can be associated with reduced cognitive abilities and occurrence of several neurodegenerative diseases.

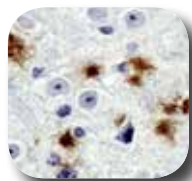
## Synaptotoxicity Pathway in Alzheimer's Disease



### beta Amyloid Antibody (MOAB-2) NBP2-13075 (4 publications)

**Species:** Hu, Mu, Rt

**Applications:** WB, ELISA, ICC/IF, IHC-P, IHC-FrFI

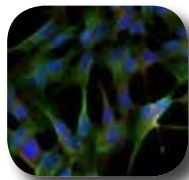


IHC analysis of 5xFAD mouse brain tissue using beta Amyloid antibody clone MOAB-2.

### LRRK2 Antibody NB300-268 (31 publications)

**Species:** Hu, Mu, Bv, Ce

**Applications:** WB, ICC/IF, IHC-Fr, IHC-P, IP



ICC/IF analysis of SH-SY5Y cells using LRRK2 antibody (green).

### NF-H Antibody NB300-135 (6 publications)

**Species:** Hu, Mu, Rt, Po, Bv, Fe

**Applications:** WB, ELISA, ICC/IF, IHC-Fr, IHC-P



ICC/IF analysis of rat spinal cord using NF-H antibody (green).

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Novus Biologicals licenses, manufactures and markets antibodies for more than 20,000 unique targets. We provide high quality, validated antibodies to help accelerate life sciences research. We offer a range of neurodegeneration related primary antibodies as well as antibody support products.

## Popular Neurodegeneration Related Antibodies

### **BDNF Antibody (14C8.1D9)** **NBP2-42215 (4 Publications)**

**Species:** Hu, Rt, Po, Bv, Pr

**Applications:** WB, Flow, ICC/IF, IHC-P



IHC analysis of human spinal cord dorsal horn using BDNF antibody.

### **Choline Acetyltransferase/ChAT Antibody** **NB110-89724 (1 publication)**

**Species:** Mu, Rt

**Applications:** WB, ICC/IF, IHC-P, IHC-Fr/I



IHC/Fr/I analysis of rat spinal cord using ChAT antibody.

### **MBP (12) Antibody** **NB600-717 (11 Publications)**

**Species:** Hu, Mu, Rt, Po, Bv, Ch, Gp, Rb, Sh

**Applications:** WB, ELISA, ICC/IF, IHC-Fr, IHC-P, RI



WB analysis of mouse brain tissue lysate using Myelin Basic Protein (MBP) antibody clone 12.

### **Myelin PLP Antibody** **NBP1-87781**

**Species:** Hu

**Applications:** WB, IHC-P

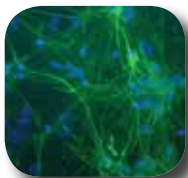


IHC-P analysis of human cerebral cortex section using Myelin PLP antibody.

### **NF-L Antibody (DA2)** **NB300-132 (4 publications)**

**Species:** Hu, Mu, Rt, Av

**Applications:** SW, WB, ICC/IF, IHC-P



ICC/IF analysis of neuronal cultures using NF-L antibody clone DA2 (green).

### **Park7/DJ-1 Antibody** **NB300-270 (14 publications)**

**Species:** Hu, Mu, Ch

**Applications:** SW, WB, ICC/IF, IP, In vitro

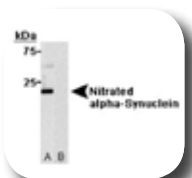


Simple Western (SW) analysis of human brain lysate using Park7/DJ-1 antibody.

### **Synuclein-alpha [Nitrate Tyr125, Nitrate Tyr133] (24.8) Antibody** **NBP1-26380 (2 publications)**

**Species:** Hu, Mu

**Applications:** WB, Flow, ICC/IF, IHC-Fr, IHC-P



WB analysis of (A) nitrated synuclein-alpha and (B) non-nitrated synuclein-alpha proteins using Synuclein-alpha [Nitrate Tyr125, Nitrate Tyr133] antibody.

### **Tau Antibody [p Thr181]** **NB100-82245**

**Species:** Hu, Mu, Rt

**Applications:** WB, IHC-P

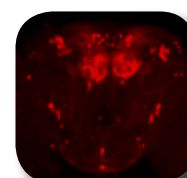


IHC-P analysis of rat hippocampal region tissue from a model of Alzheimer's disease using p-Tau (Thr 181) antibody.

### **Tyrosine Hydroxylase/TH Antibody** **NB300-109 (40 publications)**

**Species:** Hu, Mu, Rt, Dr

**Applications:** SW, WB, ICC/IF, IHC-Fr, IHC-P, IHC-Fr/I



ICC/IF analysis of whole-mount Drosophila brains using TH antibody.

## Neuroimmunology Antibodies

Antibody	Catalog #	Host/Clonality	Applications	Species	Publications
ICAM-1/CD54	NB500-318	Mu/Mono	WB, ELISA, Flow, IHC-P	Hu, Rt, Bv	3
IFN-beta	NBP1-77288	Rb/Poly	WB, ELISA, ICC/IF, IHC-P	Hu, Mu	4
IFN-gamma	NB100-78214	Mu/Mono	WB, B/N, ELISA, Flow, ICC/IF, IHC-Fr	Mu, Rt	
IL-1 beta	NB600-633	Rb/Poly	WB, EM, ELISA, IHC-P, IP	Hu, Mu, Rt, Po, Ba, Ca, Pm	7
IL-6	NBP2-16957	Rb/Poly	WB, ICC/IF, IHC-P	Hu	1
IL-8	NBP2-33819	Rb/Poly	WB, IHC-P	Hu	1
Myelin PLP	NB100-74503	Rb/Poly	WB, ICC/IF	Mu, Rt	2
TNF alpha	NB600-587	Rb/Poly	WB, ELISA, IHC-P	Hu, Mu, Rt, Pm	5

## Alzheimer's Disease

Antibody	Catalog #	Host/Clonality	Applications	Species	Publications
Apolipoprotein E/ApoE	<a href="#">NB110-60531</a>	Mu/Mono	WB, ELISA, Flow, IHC, IP	Hu, Mu	<b>5</b>
APP	<a href="#">NB120-17286</a>	Rb/Poly	IHC-P	Hu	<b>1</b>
beta Amyloid	<a href="#">NBP2-13075</a>	Mu/Mono	WB, ELISA, ICC/IF, IHC-P, IHC-FrFI, IP	Hu, Mu, Rt	<b>4</b>
MBP	<a href="#">NB600-717</a>	Rt/Mono	WB, ELISA, ICC/IF, IHC-Fr, IHC-P, RI	Hu, Mu, Rt, Po, Bv, Ch, Gp, Rb, Sh	<b>11</b>
Presenilin-1	<a href="#">NB100-74510</a>	Mu/Mono	WB, ELISA, ICC/IF, IHC-P, IP	Hu, Mu, Rt, Pm	<b>4</b>
Reelin	<a href="#">NB600-1081</a>	Mu/Mono	WB, IHC, IHC-P	Hu, Mu, Rt	<b>9</b>
Tau [p Thr181]	<a href="#">NB100-82245</a>	Rb/Poly	WB, IHC-P	Hu, Mu, Rt	

## Amyotrophic Lateral Sclerosis (ALS)

Antibody	Catalog #	Host/Clonality	Applications	Species	Publications
C9orf72	<a href="#">NBP2-15656</a>	Rb/Poly	WB, IHC-P	Hu, Mu	
CD14	<a href="#">NB100-2807</a>	Gt/Poly	WB, ICC/IF, IHC-P, PEP-ELISA	Hu	<b>2</b>
Galectin-1	<a href="#">NBP1-89791</a>	Rb/Poly	WB, IHC-P	Hu, Mu, Rt	<b>2</b>
NF-L	<a href="#">NB300-132</a>	Mu/Mono	SW, WB, ICC/IF, IHC-P	Hu, Mu, Rt, Av	<b>4</b>
NF-H	<a href="#">NB300-135</a>	Rb/Poly	WB, ELISA, ICC/IF, IHC-Fr, IHC-P	Hu, Mu, Rt, Po, Bv, Fe	<b>6</b>

## Huntington's Disease

Antibody	Catalog #	Host/Clonality	Applications	Species	Publications
BDNF	<a href="#">NBP2-42215</a>	Mu/Mono	WB, Flow, ICC/IF, IHC-P	Hu	
Choline Acetyltransferase/ChAT	<a href="#">NBP1-30052</a>	Gt/Poly	WB, ICC/IF, IHC-Fr	Hu, Mu, Rt, Ch, Gp, Pm	<b>5</b>
Histone Deacetylase 4/HDAC4	<a href="#">NB100-56341</a>	Rb/Poly	WB, ChIP, IP	Hu	<b>3</b>
Huntingtin	<a href="#">NBP1-44265</a>	Rb/Poly	WB, ELISA	Hu, Mu, Rt	<b>4</b>
SOD1/Cu-Zn SOD	<a href="#">NBP2-24915</a>	Rb/Poly	WB, IHC-P	Hu, Mu, Rt, Bv	<b>2</b>
TrkB [p Tyr515]	<a href="#">NB100-92656</a>	Rb/Poly	WB, IHC	Hu, Mu, Rt	<b>1</b>

## Multiple Sclerosis

Antibody	Catalog #	Host/Clonality	Applications	Species	Publications
CXCL13	<a href="#">NBP2-16041</a>	Rb/Poly	WB, IHC-P	Hu	
CD83	<a href="#">NB100-77812</a>	Mu/Mono	Flow	Hu, Bb, Pm	<b>3</b>
IL-6	<a href="#">NB600-1131</a>	Rb/Poly	WB, ELISA, ICC/IF, IHC-P, IP	Hu, Mu, Rt	<b>6</b>
Integrin alpha 4/CD49d	<a href="#">NBP1-77333</a>	Rb/Poly	WB, ELISA, ICC/IF	Hu, Mu, Rt	
NF-L	<a href="#">NB300-131</a>	Rb/Poly	WB, ICC/IF, IHC-P	Hu, Mu, Rt, Po, Av, Bv	<b>6</b>
Osteopontin/OPN	<a href="#">NB110-89062</a>	Mu/Mono	WB, SW, ICC/IF, IHC-Fr, IHC-P, IP	Hu, Rb, Rt	<b>11</b>

## Parkinson's Disease

Antibody	Catalog #	Host/Clonality	Applications	Species	Publications
LRRK2	<a href="#">NB300-268</a>	Rb/Poly	WB, ICC/IF, IHC-Fr, IHC-P, IP	Hu, Mu, Bv, Ce	<b>31</b>
LRRK2	<a href="#">NB110-58771</a>	Rb/Poly	WB, ICC/IF, IHC-P, IP	Hu, Mu, Rt, Pm	<b>6</b>
Park7/DJ-1	<a href="#">NB300-270</a>	Rb/Poly	SW, WB, ICC/IF, IP, In vitro	Hu, Mu, Ch	<b>14</b>
Parkin	<a href="#">NB600-1540</a>	Rb/Poly	WB, IHC-P, IP	Hu	<b>2</b>
PINK1	<a href="#">BC100-494</a>	Rb/Poly	WB, ICC/IF, IHC-P, IP, PEP-ELISA	Hu, Mu, Rt	<b>62</b>
Synuclein-alpha	<a href="#">NBP1-05194</a>	Mu/Mono	SW, WB, ICC/IF	Hu, Mu, Rt	
Tyrosine Hydroxylase	<a href="#">NB300-109</a>	Rb/Poly	WB, SW, ICC/IF, IHC-Fr, IHC-P, IHC-FrFI	Hu, Mu, Rt, Dr, Ma	<b>40</b>

# Antibody Support Products - Lysates and Proteins

Product	Catalog #	Applications
Human Brain Cerebellum Whole Tissue Lysate (Whole Parkinson's)	NB820-59409	WB, IP
Human Brain Whole Tissue Lysate (Whole Multiple Sclerosis)	NB820-59394	WB, IP
Human Brain Membrane Tissue Lysate (Normal)	NB820-60570	WB, IP
NF-L Overexpression Lysate (Native)	NBL1-13577	WB

**Species Key:** Hu (Human), Mu (Mouse), Rt (Rat), Av (Avion), Ba (Bacteria), Bb (Baboon), Bv (Bovine), Ca (Canine), Ce (C. elegans), Ch (Chicken), Dr (Drosophila), Fe (Feline), Fi (Fish), Gp (Guinea Pig), Gt (Goat), Ma (Mammal), Md (Mustelid), Pl (Plant), Po (Porcine), Pm (Primates), Rb (Rabbit), Re (Reptile), Sh (Sheep), Xp (Xenopus), Ye (Yeast), Ze (Zebrafish)

**Applications Key:** B/N (Blocking/Neutralizing), ChIP (Chromatin Immunoprecipitation), ELISA (ELISA Capture and/or Detection), EM (Electron Microscopy), Flow (Flow Cytometry), ICC/IF (Immunocytochemistry/Immunofluorescence), IHC-P (Immunohistochemistry-Paraffin), IHC-Fr (Immunohistochemistry-Frozen), IHC-FrI (Immunohistochemistry Free-Floating), IP (Immunoprecipitation), GS (Gel Supershift), PEP-ELISA (Peptide ELISA), RIA (Radioimmunoassay), SW (Simple Western), WB (Western Blot)

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