



# Neuroscience

Recombinant Proteins & Monoclonal Antibodies

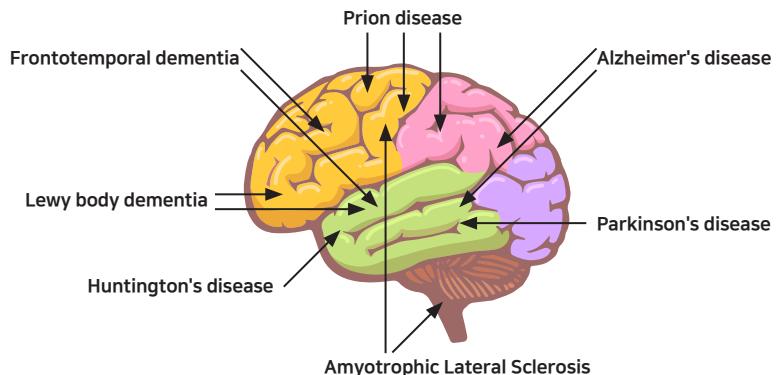
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Global NK cell Leader

# Neurodegenerative Disease

**Neurodegeneration** is the progressive loss of structure or function of neurons, including death of neurons. Many neurodegenerative diseases – including amyotrophic lateral sclerosis, Parkinson's disease, Alzheimer's disease, and Huntington's disease – occur as a result of neurodegenerative processes. Such diseases are incurable, resulting in progressive degeneration and/or death of neuron cells. As research progresses, many similarities appear that relate these diseases to one another on a sub-cellular level. Neurodegeneration can be found in many different levels of neuronal circuitry ranging from molecular to systemic.



## Related Monoclonal Antibodies

Product name	Clone No.	Applications	Host	Cat No.
alpha-Synuclein	AT1E10	ELISA, WB, ICC/IF	M	ATGA0244
	5C2	ELISA, WB, ICC/IF	M	ANC0603
HMGB1/HMG-1	3B6	ELISA, WB, FACS, ICC/IF	M	ASC0632
	J2E1	ELISA, WB, IHC	M	AHM0915
Park7/DJ-1	AT1E12	ELISA, WB, FACS, ICC/IF	M	ATGA0292
	1B11	ELISA, WB	M	ADJ0618
UCH-L1/PGP9.5	3D9	ELISA, WB, ICC/IF, IHC	M	APG0714
HTRA2/Omi	1B3	ELISA, WB	M	AOH0607
APP/Protease Nexin II	J4H9	ELISA, WB, FACS, ICC/IF	M	AAP0836
GSK-3 beta	1F7	ELISA, WB, FACS, ICC/IF	M	AGK0601
	AT6F1	ELISA, WB, FACS, ICC/IF	M	ATGA0405
14-3-3 gamma	AT4B9	ELISA, WB, ICC/IF	M	ATGA0312
14-3-3 epsilon	AT4F8	ELISA, WB, ICC/IF	M	ATGA0124
14-3-3 theta	AT1A1	ELISA, WB, ICC/IF	M	ATGA0132
CAPNS1	AT1D11	ELISA, WB, ICC/IF	M	ATGA0367
TDP-43/TARDBP	K1B8	ELISA, WB, FACS, IHC	M	ATA0834

Alpha-Synuclein antibody (AT1E10) (Cat No. ATGA0244)	UCH-L1/PGP9.5 antibody (3D9) (Cat No. APG0714)	HMGB1/HMG-1 antibody (J2E1) (Cat No. AHM0915)
<b>ICC/IF analysis</b> ICC/IF analysis of alpha-synuclein in LnCap cell line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human alpha-synuclein antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).	<b>ICC/IF analysis</b> ICC/IF analysis of UCH-L1/PGP9.5 in U87MG cell line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human UCH-L1/PGP9.5 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).	<b>Immunohistochemistry analysis</b> Paraffin embedded sections of human colon cancer tissue were incubated with anti-human HMGB1/HMG-1 (1:200) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB).

## References

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- Li R et al. Self-assembled N-cadherin mimetic peptide hydrogels promote the chondrogenesis of mesenchymal stem cells through inhibition of canonical Wnt/ $\beta$ -catenin signaling. *Biomaterials*. 2017 Nov;145:33-43. [PMID: 28843065] **GSK-3 beta(1F7), WB; Human.**
- Zheng G et al. MYCN-mediated miR-21 overexpression enhances chemo-resistance via targeting CADM1 in tongue cancer. *J Mol Med (Berl)*. 2016 Oct;94(10):1129-1141. [PMID: 27055844] **GSK-3 beta(1F7), WB; Human.**
- Ito H et al. HMGB1 facilitates repair of mitochondrial DNA damage and extends the lifespan of mutant ataxin-1 knock-in mice. *EMBO Mol Med*. 2015 Jan;7(1):78-101. [PMID: 25510912] **HMGB1/HMG-1, WB; Human.**
- Hervé ME et al. Anti-amyloid compounds inhibit  $\alpha$ -synuclein aggregation induced by Protein Misfolding Cyclic Amplification (PMCA). *J Biol Chem*. 2014 Apr 25;289(17):11897-905. [PMID: 24584936] **alpha-synuclein(5C2), WB; Human.**
- Kim JY et al. Nanomolar concentration of alpha-synuclein enhances dopaminergic neuronal survival via Akt pathway. *Neural Regen Res*. 2013 Dec 15;8(35):3269-74. [PMID: 25206648] **alpha-synuclein, ICC; Human.**

## Related Recombinant Proteins

### Parkinson's Disease

Product name	Species	Expression system	Cat No.
 alpha-synuclein, 1-140aa	H	<i>E.coli</i>	SNA2001
 alpha-synuclein (lymphilitized)	H	<i>E.coli</i>	SNA2001L
 alpha-synuclein A53T	H	<i>E.coli</i>	SNA2002
alpha-synuclein A30P	H	<i>E.coli</i>	SNA2003
alpha-synuclein A30P/A53T	H	<i>E.coli</i>	SNA2004
alpha-synuclein E46K	H	<i>E.coli</i>	SNA4001
alpha-synuclein 112 (NACP112)	H	<i>E.coli</i>	SNA2005
alpha-synuclein Delta-NAC	H	<i>E.coli</i>	SNA2008
alpha-synuclein, 1-95aa	H	<i>E.coli</i>	SNA4002
alpha-synuclein, 1-60aa	H	<i>E.coli</i>	SNA3009
alpha-synuclein, 61-140aa	H	<i>E.coli</i>	SNA2006
alpha-synuclein, 96-140aa	H	<i>E.coli</i>	SNA2007
alpha-synuclein, 1-140aa	M	<i>E.coli</i>	ATGP0619
beta-synuclein	H	<i>E.coli</i>	SNB2001
gamma-synuclein	H	<i>E.coli</i>	SNG2001
	M	<i>E.coli</i>	ATGP3677
 HMGB1/HMG-1	H	Baculovirus	HMG0801
PINK1	H	<i>E.coli</i>	ATGP1240(D)
Park7/DJ-1	H	<i>E.coli</i>	PRK0601
	M	<i>E.coli</i>	ATGP3151
Parkin	H	<i>E.coli</i>	ATGP2517(D)
 UCH-L1/PGP9.5	H	<i>E.coli</i>	PGP0701
	M	<i>E.coli</i>	ATGP3568
HTRA2/Omi	H	<i>E.coli</i>	HTR0501
DBH	H	<i>E.coli</i>	ATGP3032
Th	M	Baculovirus	ATGP3438
 Dopa carboxylase/DDC	H	<i>E.coli</i>	ATGP0267

### Prion Disease

Product name	Species	Expression system	Cat No.
PRNP	H	<i>E.coli</i>	ATGP2013(D)
PRND	H	<i>E.coli</i>	ATGP1924
14-3-3 beta	H	<i>E.coli</i>	ATGP3590
	H	<i>E.coli</i>	YWBO801
 14-3-3 gamma	H	<i>E.coli</i>	YWG0701
14-3-3 epsilon	H	<i>E.coli</i>	ATGP3587
	H	<i>E.coli</i>	YWE0701
14-3-3 zeta	H	<i>E.coli</i>	YWZ0801
14-3-3 eta	H	<i>E.coli</i>	YWH0802
	H	<i>E.coli</i>	ATGP3347
14-3-3 sigma	H	<i>E.coli</i>	ATGP0435
14-3-3 theta	H	<i>E.coli</i>	YWQ0702
S100B	H	<i>E.coli</i>	ATGP0628
	H	<i>E.coli</i>	ATGP3314
	M	<i>E.coli</i>	ATGP0608
	M	<i>E.coli</i>	ATGP3473

H : Human M : Mouse R : Rat D : Denature form

### Alzheimer's Disease

Product name	Species	Expression system	Cat No.
 APP/Protease Nexin II	H	<i>E.coli</i>	ATGP1499
Serum Amyloid A1	H	<i>E.coli</i>	ATGP0373
Serum Amyloid A4	H	<i>E.coli</i>	ATGP0793
ADAM10	H	Baculovirus	ATGP3448
MME	H	Baculovirus	ATGP3646
CAPNS1	H	<i>E.coli</i>	ATGP2681
CDK5	H	<i>E.coli</i>	ATGP1835(D)
	H	Baculovirus	ATGP3683
GSK-3 beta	H	<i>E.coli</i>	ATGP2503(D)
	H	Baculovirus	ATGP3221
Calbindin1	H	<i>E.coli</i>	ATGP0381
Tau, 1-352aa	H	<i>E.coli</i>	ATGP0646
Tau, 1-381aa	H	<i>E.coli</i>	ATGP0814
 Tau, 1-383aa	H	<i>E.coli</i>	ATGP0795
Tau, 1-412aa	H	<i>E.coli</i>	ATGP1030

### Amyotrophic Lateral Sclerosis

Product name	Species	Expression system	Cat No.
 TDP-43/TARDBP	H	<i>E.coli</i>	ATGP2032
	H	<i>E.coli</i>	ATGP2093(D)
HNRNPA1	H	<i>E.coli</i>	ATGP1411
SOD1/Cu-Zn SOD	H	<i>E.coli</i>	SOD0801
VAP-B	H	<i>E.coli</i>	ATGP0800
 p62/SQSTM1	H	<i>E.coli</i>	ATGP0532
CHMP2B	H	<i>E.coli</i>	ATGP1115
TAF15	H	<i>E.coli</i>	ATGP2466
ANG	H	<i>E.coli</i>	ATGP2604(D)
UBQLN2	H	<i>E.coli</i>	ATGP3163
DAAO	H	<i>E.coli</i>	ATGP3237
	H	<i>E.coli</i>	ATGP0338
Profilin 1	H	<i>E.coli</i>	ATGP0376
	R	<i>E.coli</i>	ATGP3173
PDRG1	H	<i>E.coli</i>	ATGP0785

### Reference

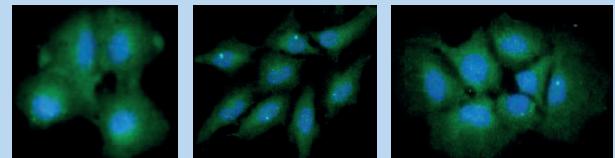
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- Rodriguez-Araujo G et al. Low alpha-synuclein levels in the blood are associated with insulin resistance. *Sci Rep.* 2015 Jul 10;5:12081. [PMID: 26159928] **Recombinant alpha-Synuclein.**
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- Takahashi T et al. Bone-targeting endogenous secretory receptor for advanced glycation end products rescues rheumatoid arthritis. *Mol Med.* 2013 Jul 24;19:183-94. [PMID: 23821362] **Recombinant HMGB1/HMG-1.**
- Konno M et al. Suppression of dynamin GTPase decreases alpha-synuclein uptake by neuronal and oligodendroglial cells: a potent therapeutic target for synucleinopathy. *Mol Neurodegener.* 2012 Aug 14;7:38. [PMID: 22892036] **Recombinant alpha-synuclein A30P/A53T, beta-synuclein, gamma-synuclein.**
- Kim KS et al. Proteolytic cleavage of extracellular alpha-synuclein by plasmin: implications for Parkinson disease. *J Biol Chem.* 2012 Jul 20;287(30):24862-72. [PMID: 22619171] **Recombinant alpha-synuclein A30P, A53T and E46K.**
- Kwon MJ et al. Superoxide Dismutase 3 Controls Adaptive Immune Responses and Contributes to the Inhibition of Ovalbumin-Induced Allergic Airway Inflammation in Mice. *Antioxid Redox Signal.* 2012 Nov 15;17(10):1376-92. [PMID: 22583151] **Recombinant SOD1/Cu-Zn SOD.**
- Kim KS et al. Regulation of Weibel-Palade body exocytosis by alpha-synuclein in endothelial cells. *J Biol Chem.* 2010 Jul 9;285(28):21416-25. [PMID: 20448034] **Recombinant alpha-synuclein, beta-synuclein, gamma-synuclein.**

# Neuroinflammation

## Related Monoclonal Antibodies

Product name (Clone No.)	Applications	Cat No.
IL-6 (AT1H6)	ELISA, WB, FACS, ICC/IF	ATGA0123
IL-6 (AT1F10)	ELISA, WB	ATGA0313
IL-33 (4E9)	ELISA, WB, FACS, ICC/IF	AIL0824
GMF-beta/GMFB (AT44D8)	ELISA, WB, ICC/IF	ATGA0452
 TLR7 (4F4)	ELISA, FACS, ICC/IF	ATR0601
 Enolase 2/NSE (AT17D10)	ELISA, WB, ICC/IF	ATGA0273
IGF-I (AT6F8)	ELISA, WB, ICC/IF	ATGA0311

IL-6 antibody (AT1H6) (Cat No. ATGA0123)



### ICC/IF analysis

ICC/IF analysis of IL-6 in A549 (Left), HeLa (Middle) and Hep3B (Right) cell lines, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human IL-6 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

## Related Recombinant Proteins

### Cytokine

Product name	Species	Expression system	Cat No.
IL-1 alpha	H	<i>E.coli</i>	ILA0801
	M	<i>E.coli</i>	ATGP2863(D)
	M	Baculovirus	ATGP3778
	R	<i>E.coli</i>	ATGP3192
IL-1 beta	H	<i>E.coli</i>	ILB0701
	M	<i>E.coli</i>	ATGP3398
IL-2 (C145S)	H	<i>E.coli</i>	ILB0501
 IL-2 (C160S)	M	<i>E.coli</i>	ATGP2987
IL-2	R	<i>E.coli</i>	ATGP3889
IL-2 (C147S)	C	<i>E.coli</i>	ATGP3544
IL-2 (C146S)	F	<i>E.coli</i>	ATGP3611
 IL-4	H	<i>E.coli</i>	ILD0905
	H	<i>E.coli</i>	ATGP3421
 IL-6	H	<i>E.coli</i>	ATGP0352
	H	<i>E.coli</i>	ATGP3256
	H	Baculovirus	ATGP3278
	M	<i>E.coli</i>	ATGP2828(D)
	M	Baculovirus	ATGP3154
	R	Baculovirus	ATGP3711
	C	Baculovirus	ATGP3543
IL-10	H	<i>E.coli</i>	ILJ0904
IL-17A	H	Baculovirus	ATGP3083
	M	Baculovirus	ATGP3280
IL-17F	H	<i>E.coli</i>	ATGP2215(D)
	H	Baculovirus	ATGP3605
 IL-18	M	<i>E.coli</i>	ATGP0271
	M	<i>E.coli</i>	ATGP3006
 TNF-alpha	H	Baculovirus	ATGP3598
	H	<i>E.coli</i>	TNF0501
	H	Baculovirus	ATGP3152
	M	<i>E.coli</i>	ATGP3651
	M	Baculovirus	ATGP3184
	R	<i>E.coli</i>	ATGP3736
	B	<i>E.coli</i>	ATGP3857
 IFN-gamma	H	<i>E.coli</i>	ATGP3723
	H	<i>E.coli</i>	IFG4001
	M	<i>E.coli</i>	ATGP3513
	C	<i>E.coli</i>	ATGP3626
	F	<i>E.coli</i>	ATGP3505

### Chemokine, Adhesion molecule

Product name	Species	Expression system	Cat No.
CCL2	H	<i>E.coli</i>	CCL0905
	M	<i>E.coli</i>	ATGP2074
CCL3	H	<i>E.coli</i>	ATGP1019
	M	<i>E.coli</i>	ATGP1765
CCL5/RANTES	H	<i>E.coli</i>	ATGP0374
CCL11/Eotaxin	H	<i>E.coli</i>	ATGP0447
CXCL1	H	<i>E.coli</i>	CXC0901
	M	<i>E.coli</i>	ATGP1525
CXCL2/GRO Pan	H	<i>E.coli</i>	ATGP0299
IL-8/CXCL8	H	<i>E.coli</i>	ILH0501
CXCL12	H	<i>E.coli</i>	ATGP0322
	M	<i>E.coli</i>	ATGP3159
ICAM-1	H	Baculovirus	ATGP3030
	M	Baculovirus	ATGP3268
VCAM-1	H	<i>E.coli</i>	ATGP1573
	H	Baculovirus	ATGP3468
	M	Baculovirus	ATGP3246

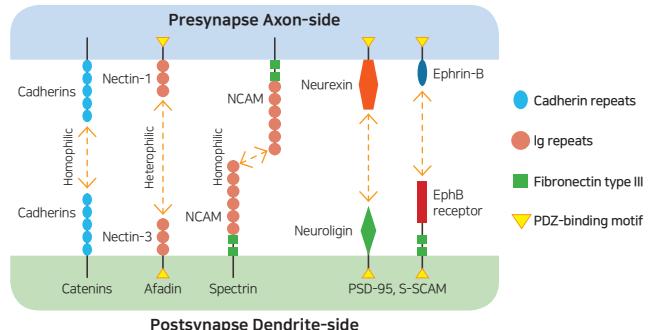
### Others

Product name	Species	Expression system	Cat No.
MMP2	H	<i>E.coli</i>	ATGP2547
M-CSF/CSF1	H	<i>E.coli</i>	ATGP0432
	H	Baculovirus	ATGP3565
FGF2	H	<i>E.coli</i>	ATGP3786
IGF-I	H	<i>E.coli</i>	IGF0501
TLR2	H	Baculovirus	ATGP3396
	M	Baculovirus	ATGP3597
TLR3	H	Baculovirus	ATGP3761
 S100B	H	<i>E.coli</i>	ATGP0628
	H	<i>E.coli</i>	ATGP3314
	M	<i>E.coli</i>	ATGP0608
	M	<i>E.coli</i>	ATGP3473
CASP3	H	<i>E.coli</i>	ATGP2651(D)
 Enolase 2/NSE	H	<i>E.coli</i>	NSE0801
 MBP	H	<i>E.coli</i>	ATGP2348

H : Human M : Mouse R : Rat C : Canine F : Feline B : Bovine D : Denature form

# Synaptic Adhesion Molecule

The **cell-cell adhesion system** is involved in many aspects of neuronal development, including neuronal cell migration, axon bundle formation, synapse formation and formation of complex of glial networks which surround axons and synapses. These adhesion systems are important for brain morphology and highly coordinated brain functions, such as memory and learning. Like epithelial junctions, cell-cell junctions in the nervous systems contain a variety of transmembrane proteins, cytoskeletal elements and signaling complexes. *Cell Adhesion & Migration*, 2009.



## Related Monoclonal Antibodies

Product name	Clone No.	Applications	Host	Cat No.
<b>EphA2</b>	3D7	ELISA, WB, IHC	M	AEA0909
	AT66G9	ELISA, WB, ICC/IF	M	ATGA0441

EphA2 antibody (3D7) (Cat No. AEA0909)	EphA2 antibody (AT66G9) (Cat No. ATGA0441)
<b>Immunohistochemistry analysis</b> Paraffin embedded sections of human colon cancer (Left) and human gastric cancer (Right) tissue were incubated with anti-human EphA2 (1:100) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB).	<b>ICC/IF analysis</b> ICC/IF analysis of EphA2 in HeLa (Left) and A431 (Right) cell lines, stained monoclonal anti-human EphA2 (1:100). A Goat anti mouse IgG-Alexa fluor 488 (Green) was used as the secondary antibody.

## Related Recombinant Proteins

### Eph receptor, Ephrin

Product name	Species	Expression system	Cat No.
EphA2	H	Baculovirus	ATGP3378
EphA4	M	Baculovirus	ATGP3403
EphB2	H	Baculovirus	ATGP3493
<b>EphB4</b>	M	Baculovirus	ATGP3415
	H	<i>E.coli</i>	ATGP1279(D)
<b>Ephrin-A1</b>	H	Baculovirus	ATGP3782
	H	<i>E.coli</i>	ATGP2094(D)
Ephrin-A3	H	<i>E.coli</i>	ATGP3354
<b>Ephrin-A5</b>	H	Baculovirus	ATGP1193(D)
	H	<i>E.coli</i>	ATGP3800
<b>Ephrin-B1</b>	H	Baculovirus	ATGP1220
	M	Baculovirus	ATGP3212
<b>Ephrin-B2</b>	H	<i>E.coli</i>	ATGP1658(D)
	H	Baculovirus	ATGP3499

### References

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Makni-Maaele K et al. The TLR7/8 agonist CL097 primes N-formyl-methionyl-leucyl-phenylalanine-stimulated NADPH oxidase activation in human neutrophils: critical role of p47phox phosphorylation and the proline isomerase Pin1. *J Immunol*. 2012 Nov 1;189(9):4657-65. [PMID: 23002436] **TLR7(4F4)**, WB; Human.

### Nectin, Cadherin

Product name	Species	Expression system	Cat No.
Nectin-1	H	Baculovirus	ATGP3283
Nectin-2	H	Baculovirus	ATGP3641
Nectin-3	H	Baculovirus	ATGP3716
CDH2	H	Baculovirus	ATGP3634
PCDHGC4	H	<i>E.coli</i>	ATGP2521(D)

### Others

Product name	Species	Expression system	Cat No.
FLRT3	H	Baculovirus	ATGP3202
L1CAM	H	Baculovirus	ATGP3618
CADM1	H	<i>E.coli</i>	ATGP2840
NXPH1	H	<i>E.coli</i>	ATGP2539(D)
	H	Baculovirus	ATGP3559

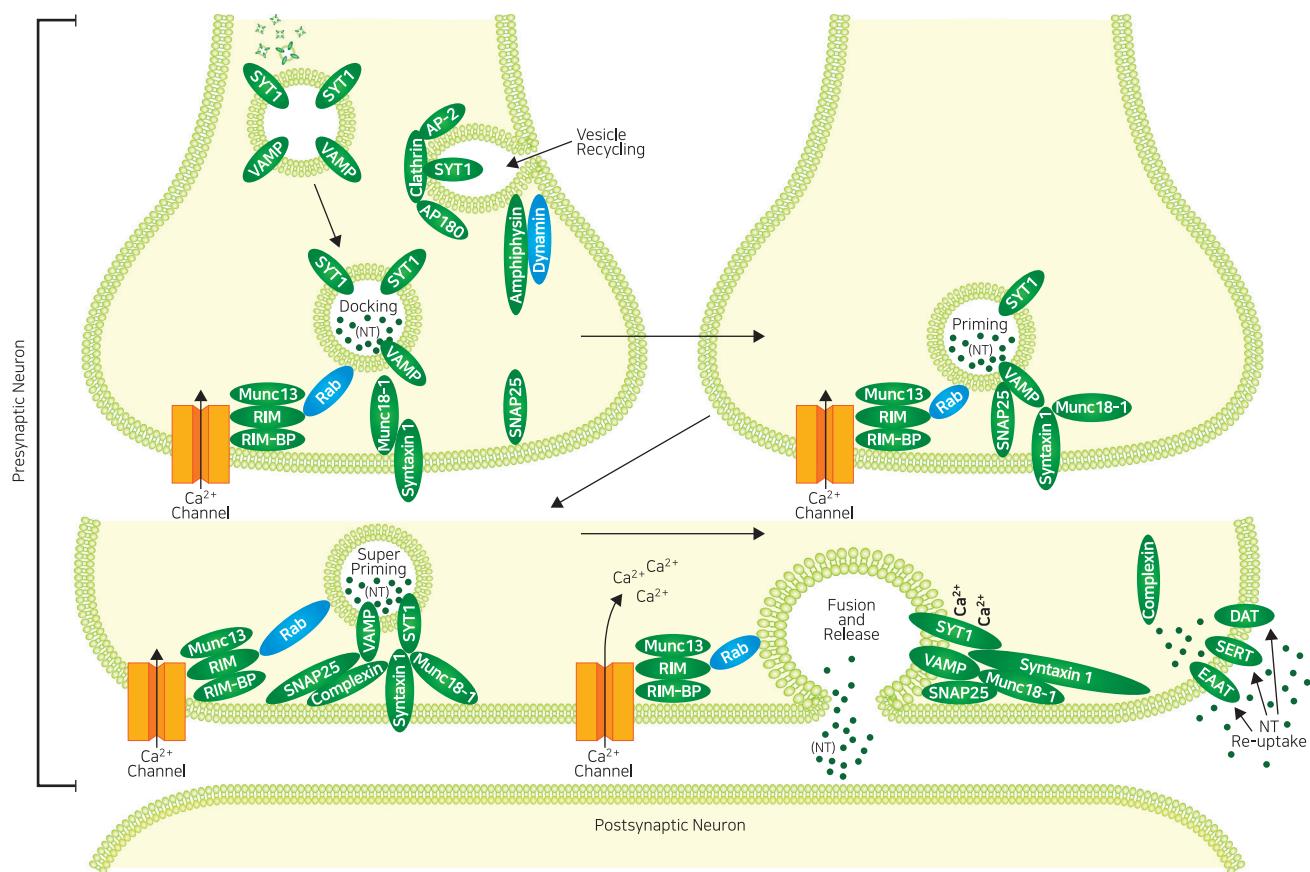
H : Human M : Mouse D : Denature form

Wu Z et al. Quantitative chemical proteomics reveals new potential drug targets in head and neck cancer. *Mol Cell Proteomics*. 2011 Dec;10(12):M111.011635. [PMID: 21955398] **EphA2(3D7)**, WB.

Wang K et al. Correlation of TLR1-10 expression in peripheral blood mononuclear cells with chronic hepatitis B and chronic hepatitis B-related liver failure. *Hum Immunol*. 2010 Oct;71(10):950-6. [PMID: 20667457] **TLR7(4F4)**, WB; Human.

# Synaptic Vesicle Molecule

## Presynaptic Vesicle Trafficking



## Related Monoclonal Antibodies

Product name	Clone No.	Applications	Host	Cat No.
VAMP2	3E5	ELISA, WB, ICC/IF	M	AVA0710
VAMP3	AT4G9	ELISA, WB, FACS	M	AVA0922
SNAP25	4E11	ELISA, WB, FACS, ICC/IF	M	ASN0720
RAB5A	3A4	ELISA, WB, ICC/IF	M	ARA0803
RAB7A	AT10E4	ELISA, WB, FACS, ICC/IF	M	ATGA0471

VAMP-2 antibody (3E5) (Cat No. AVA0710)	SNAP25 antibody (4E11) (Cat No. ASN0720)	RAB7A antibody (AT10E4) (Cat No. ATGA0471)
<b>ICC/IF analysis</b> ICC/IF analysis of VAMP2 in U87MG cell line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human VAMP2 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).	<b>ICC/IF analysis</b> ICC/IF analysis of SNAP25 in U87MG cell line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human SNAP25 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).	<b>ICC/IF analysis</b> ICC/IF analysis of RAB7A in HeLa cell line. The cell was stained with ATGA0471 (1:100). The secondary antibody (Green) was used Alexa fluor 488. DAPI was stained the cell nucleus (Blue).

## References

- Del Cid-Pellitero E et al. Homeostatic Changes in GABA and Glutamate Receptors on Excitatory Cortical Neurons during Sleep Deprivation and Recovery. *Front Syst Neurosci*. 2017 Mar 31;11:17. [PMID: 28408870] **RAB5A(3A4), IHC; Mouse.**
- Bu L et al. Activated central galanin 1 receptor alleviated insulin resistance in diabetic rat muscle. *J Neurosci Res*. 2016 Oct;94(10):947-55. [PMID: 27410235] **VAMP2(3E5), WB; Human.**
- Martin-Avila A et al. Protein Tyrosine Kinase Fyn Regulates TLR4-Elicited Responses on Mast Cells Controlling the Function of a PP2A-PKCa/B Signaling Node Leading to TNF Secretion. *J Immunol*. 2016 Jun 15;196(12):5075-88. [PMID: 27183589] **VAMP3(AT4G9), IP; Mouse.**
- Calvo-Gallardo E et al. Depressed excitability and ion currents linked to slow exocytotic fusion pore in chromaffin cells of the SOD1(G93A) mouse model of amyotrophic lateral sclerosis. *Am J Physiol Cell Physiol*. 2015 Jan 1;308(1):C1-19. [PMID: 25377090] **VAMP2(3E5), WB; Human.**
- Kalb SR et al. Functional Characterization of Botulinum Neurotoxin Serotype H as a Hybrid of Known Serotypes F and A (BoNT F/A). *Anal Chem*. 2015 Apr 7;87(7):3911-7. [PMID: 25731972]
- Recombinant VAMP2.**
- Kull S et al. Isolation and Functional Characterization of the Novel Clostridium botulinum Neurotoxin A8 Subtype. *PLoS One*. 2015 Feb 6;10(2):e0116381. [PMID: 25658638] **Recombinant SNAP25.**

## Related Recombinant Proteins

### Synaptobrevin

Product name	Species	Expression system	Cat No.
VAMP1	H	<i>E.coli</i>	VAM0711
VAMP2, 1-89aa	H	<i>E.coli</i>	VAM0710
VAMP2, 1-94aa	H	Baculovirus	ATGP3636
VAMP2	M	<i>E.coli</i>	ATGP3555
VAMP3	H	<i>E.coli</i>	VAM0801
VAMP4	H	<i>E.coli</i>	ATGP0360
VAMP5	H	<i>E.coli</i>	ATGP0298
VAMP7	H	<i>E.coli</i>	ATGP1686
VAMP8	H	<i>E.coli</i>	VAM0901

### Rab protein

Product name	Species	Expression system	Cat No.
RAB1A	H	<i>E.coli</i>	ATGP0900
RAB1B	H	<i>E.coli</i>	ATGP0828
RAB3A	H	<i>E.coli</i>	ATGP1105
RAB3B	H	<i>E.coli</i>	ATGP1111
RAB3D	H	<i>E.coli</i>	ATGP1102
RAB5A	H	<i>E.coli</i>	RAB0701
RAB5B	H	<i>E.coli</i>	ATGP0846
RAB5C	H	<i>E.coli</i>	ATGP2047
RAB7A	H	<i>E.coli</i>	ATGP0877

### Syntaxin

Product name	Species	Expression system	Cat No.
STX1A, 1-226aa	H	<i>E.coli</i>	STX0706
STX1A, 1-265aa	H	<i>E.coli</i>	ATGP3392
STX2	H	<i>E.coli</i>	ATGP1613
STX3	H	<i>E.coli</i>	ATGP1502
STX4	H	<i>E.coli</i>	ATGP1667
STX6	H	<i>E.coli</i>	ATGP2343
STX11	H	<i>E.coli</i>	ATGP1553(D)
STX12	H	<i>E.coli</i>	ATGP1536
STX17	H	<i>E.coli</i>	ATGP2344

### Synaptic vesicle associated protein

Product name	Species	Expression system	Cat No.
Complexin-1/2	H	<i>E.coli</i>	CPX0901
CLTA	H	<i>E.coli</i>	ATGP1560
CLTB	H	<i>E.coli</i>	ATGP1662
Endophilin A1	H	<i>E.coli</i>	ATGP1506
SH3GL3	H	<i>E.coli</i>	ATGP2933
SH3GLB1	H	<i>E.coli</i>	ATGP1801
SH3GLB2	H	<i>E.coli</i>	ATGP1814
BIN1	H	<i>E.coli</i>	ATGP0673
SYNJ2BP	H	<i>E.coli</i>	ATGP2570
CAMK2N2	H	<i>E.coli</i>	ATGP2776
alpha-SNAP	H	<i>E.coli</i>	ATGP0708
gamma-SNAP	H	<i>E.coli</i>	ATGP1228
Snapin/SNAPAP	H	<i>E.coli</i>	SNA0901
Syntaphilin	H	<i>E.coli</i>	SNP0902
STXBP6	H	<i>E.coli</i>	ATGP2779

### Others

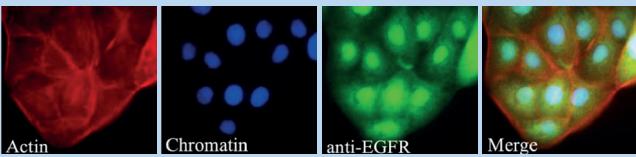
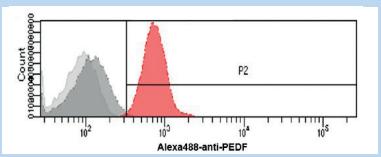
Product name	Species	Expression system	Cat No.
LIN7A	H	<i>E.coli</i>	ATGP1757
LIN7B	H	<i>E.coli</i>	ATGP1825
LIN7C	H	<i>E.coli</i>	ATGP1837
VAT1	H	<i>E.coli</i>	ATGP1339
VTI1B	H	<i>E.coli</i>	ATGP1568
RABIF	H	<i>E.coli</i>	ATGP0692
ATP6V1F	H	<i>E.coli</i>	ATGP2947

H : Human M : Mouse D : Denature form

# Other Neurological Product

## Related Monoclonal Antibodies

Product name	Clone No.	Applications	Host	Cat No.
EGFR	AT2H8	ELISA, WB	M	ATGA0212
	AT6E3	ELISA, WB, ICC/IF	M	ATGA0197
Serpin F1/PEDF	AT13D9	ELISA, WB, FACS	M	ATGA0484

EGFR antibody (AT2H8) (Cat No. ATGA0212)	Serpin F1/PEDF antibody (AT13D9) (Cat No. ATGA0484)
 <p>Actin      Chromatin      anti-EGFR      Merge</p>	
<b>Immunofluorescence analysis</b> Immunofluorescence analysis of EGFR in HaCaT cell line. The cell was stained with Hoechst 3342 or phalloidin-TRITC for nucleus (Blue) or actin (Red) staining, respectively. Monoclonal anti-human EGFR antibody (1:250) was stained. A Goat anti mouse IgG-Alexa fluor 488 (Green) was used as the secondary antibody.	<b>Flow cytometry analysis</b> Flow cytometry analysis of Serpin F1/PEDF in K562 cell line, staining at 2-5µg for 1x10 <sup>6</sup> cells (Red). A Goat anti mouse IgG-Alexa fluor 488 was used as the secondary antibody. Isotype control antibody was mouse IgG (Dark gray). Cells without incubation with primary and secondary antibody were used as the negative control (Light gray).

## Related Recombinant Proteins

### Neurotrophic Factor

Product name	Species	Expression system	Cat No.
CNTF	H	<i>E.coli</i>	ATGP3455
	H	<i>E.coli</i>	ATGP3316
	R	<i>E.coli</i>	ATGP3219
CNTFR	H	<i>E.coli</i>	ATGP3010(D)
	H	Baculovirus	ATGP3830
	R	Baculovirus	ATGP3474
BDNF	H	<i>E.coli</i>	ATGP3000(D)
MANF	H	<i>E.coli</i>	ATGP1465
NT-4	H	<i>E.coli</i>	ATGP1175(D)
NTRK2	H	Baculovirus	ATGP3264
	M	Baculovirus	ATGP3204
GFRA1	R	Baculovirus	ATGP3579
GFRA3	H	Baculovirus	ATGP3585
FGF2	H	<i>E.coli</i>	ATGP3786
LIF	H	<i>E.coli</i>	ATGP0756
	H	Baculovirus	ATGP3533
LIFR	H	Baculovirus	ATGP3310
TGF-beta 1	H	<i>E.coli</i>	ATGP0383
	M	<i>E.coli</i>	ATGP2918(D)
TGF-beta 3	H	<i>E.coli</i>	ATGP3026(D)
TGFBRAP1	H	<i>E.coli</i>	ATGP2588(D)
NRGN	H	<i>E.coli</i>	ATGP2734
NEuROG3	H	<i>E.coli</i>	ATGP2498(D)
MTPN	H	<i>E.coli</i>	ATGP0621
Serpin F1/PEDF	H	<i>E.coli</i>	ATGP0342
NRG4	H	<i>E.coli</i>	ATGP2472
EGF	H	<i>E.coli</i>	EGF0501
	M	<i>E.coli</i>	ATGP3729
	M	<i>E.coli</i>	ATGP1532

### Neurotrophic Factor (continued)

Product name	Species	Expression system	Cat No.
EGFR(hIgG-Fc)	H	CHO	ATGP3335
TGFB1	H	Baculovirus	ATGP3735
TGFB2	H	Baculovirus	ATGP3355

### Neurotransmitter, Neuropeptide

Product name	Species	Expression system	Cat No.
CHRNA3	H	<i>E.coli</i>	ATGP3106(D)
CHRNA6	H	<i>E.coli</i>	ATGP2572(D)
GABARAP	H	<i>E.coli</i>	ATGP0465
Pro-GABARAPL1	H	<i>E.coli</i>	ATGP0832
GATE-16	H	<i>E.coli</i>	ATGP0885
NMB	H	<i>E.coli</i>	ATGP2162(D)
NTS	H	Baculovirus	ATGP3482
Neurokinin B	H	<i>E.coli</i>	ATGP0362
TAC1	H	<i>E.coli</i>	ATGP1879(D)
EDN2	H	<i>E.coli</i>	ATGP2001(D)
EDN3	H	<i>E.coli</i>	ATGP2954
GAL	H	<i>E.coli</i>	ATGP2054

### Neuroendocrine Secretory

Product name	Species	Expression system	Cat No.
Chromogranin-A	H	<i>E.coli</i>	ATGP0323
Vasostatin 2	H	<i>E.coli</i>	ATGP0309
CHGA	H	Baculovirus	ATGP3728
CHGB	H	<i>E.coli</i>	ATGP0523
SCG3	H	<i>E.coli</i>	ATGP2213
SCG5	H	<i>E.coli</i>	ATGP0693

H : Human M : Mouse R : Rat D : Denature form