

Product datasheet for **TA328901**

Nlgn1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)KVPSTDITLRPTRK, corresponding to amino acid residues 648-661 of rat Neuroigin 1 (. Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	neuroigin 1
Database Link:	NP_446320 Entrez Gene 192167 Mouse Entrez Gene 116647 Rat Q62765



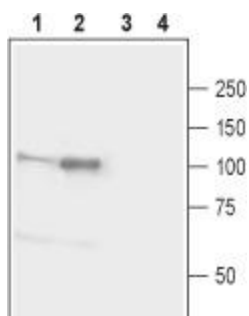
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Background:

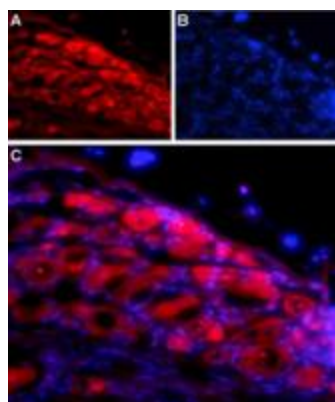
The NLGN1 gene encodes a member of a family of neuronal cell surface proteins. Neuroligins act as ligands for α -Neurexins, cell adhesion proteins located presynaptically. Neuroligin and α -neurexin "shake hands," resulting in the connection between the two neurons and the production of a synapse. Neuroligin 1 may be involved in the formation and remodeling of central nervous system synapses. Proteins of this family may also mediate signaling by recruiting and stabilizing key synaptic components. This is done by interacting with other postsynaptic proteins to localize neurotransmitter receptors and channels in the postsynaptic density as the cell matures. Mutations in the Neuroligin genes are implicated in autism and other cognitive disorders. Neuroligins have been found to play a role in angiogenesis, specifically in human peripheral tissues. Neuroligins bind with the help of Ca^{2+} to the α -neurexin LNS (laminin, neurexin and sex hormone-binding globulin-like folding units) domains and to the α -neurexin LNS domain which then establishes a heterophilic trans-synaptic recognition code⁴. This binding results in a heterotetramer made up of a Neuroligin-1 dimer and two Neurexin-1 α monomers.

Synonyms:

KIAA1070; MGC45115; NL1; OTTHUMP00000211275; OTTHUMP00000211276

Product images:

Western blot analysis of mouse brain (lanes 1 and 3) and rat brain lysates (lanes 2 and 4): 1, 2. Anti-Neuroigin 1 (extracellular) antibody, (1:800). 3, 4. Anti-Neuroigin 1 (extracellular) antibody preincubated with the control peptide antigen.



Expression of Neuroigin 1 in rat DRG. Immunohistochemical staining of adult rat dorsal root ganglion (DRG) using Anti-Neuroigin 1 (extracellular) antibody followed by anti-rabbit-AlexaFluor-594 secondary antibody. A. Neuroigin 1 labeling (red) appears in the cell bodies of the DRG neurons. B. Nuclear staining using DAPI as the counter stain (blue). C. Merged image of A and B.