

Rabbit Anti-NLGN2 antibody

SL11098R

Product Name:	NLGN2
Chinese Name:	神经连接蛋白2抗体
Alias:	NL2; Neuroligin 2; Ortholog of human and rat neuroligin 2 NLGN2. KIAA1366; MGC67386; RP23-422L16.24; NLGN2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	90kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NLGN1:251-350/835 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Neuroligins are a family of plasma membrane proteins that possess an N-terminal hydrophobic domain, a large esterase homology domain, a single transmembrane region, a short cytoplasmic domain, and an EF-hand binding domain (1,2). Members of the neuroligin family include Neuroligin 1, Neuroligin 2 and Neuroligin 3. Neuroligins are expressed in excitatory neuronal synaptic clefts. Neuroligins play a role in the formation

and remodeling of CNS synapses by binding to b-neurexins, a family of neuronal cell surface proteins. Neuroexin 1b binds to the EF-hand domain of Neuroligin 1 and requires calcium ion. Neuroligins also bind to PSD-95, which may recruit ion channels and neurotransmitter receptors to the synapses.

Function:

Transmembrane scaffolding protein involved in cell-cell interactions via its interactions with neurexin family members. Mediates cell-cell interactions both in neurons and in other types of cells, such as Langerhans beta cells. Plays a role in synapse function and synaptic signal transmission, especially via gamma-aminobutyric acid receptors (GABA(A) receptors). Functions by recruiting and clustering synaptic proteins. Promotes clustering of postsynaptic GABRG2 and GPHN. Modulates signaling by inhibitory synapses, and thereby plays a role in controlling the ratio of signaling by excitatory and inhibitory synapses and information processing. Required for normal signal amplitude from inhibitory synapses, but is not essential for normal signal frequency. May promote the initial formation of synapses, but is not essential for this. In vitro, triggers the de novo formation of presynaptic structures. Mediates cell-cell interactions between Langerhans beta cells and modulates insulin secretion.

Subunit:

Interacts with NRXN1, NRXN2 and NRXN3. Interacts (via its C-terminus) with DLG4/PSD-95 (via PDZ domain 3). Interacts with INADL. Interacts with GPHN.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Cell junction, synapse, postsynaptic cell membrane. Cell junction, synapse, presynaptic cell membrane. Note=Detected at postsynaptic membranes in brain. Detected at dendritic spines in cultured neurons. Colocalizes with GPHN and ARHGEF9 at neuronal cell membranes (By similarity). Localized at presynaptic membranes in retina. Colocalizes with GABRG2 at inhibitory synapses in the retina.

Tissue Specificity:

Expressed in the blood vessel walls. Detected in colon, brian and pancreas islets of Langerhans (at protein level). Detected in brain, and at lower levels in pancreas islet beta cells.

Similarity:

Belongs to the type-B carboxylesterase/lipase family.

SWISS:

Q8NFZ4

Gene ID:

57555

Database links:

Entrez Gene: 57555Human

Entrez Gene: 216856 Mouse

Entrez Gene: 117096Rat

Omim: 606479Human

SwissProt: Q8NFZ4Human

SwissProt: Q69ZK9Mouse

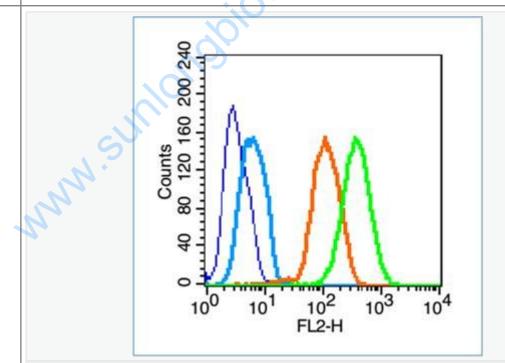
SwissProt: Q62888Rat

Unigene: 26229Human

Unigene: 55111Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Blank control (blue line): U251 (fixed with 70% ethanol for 5 min at -20°C).

Primary Antibody (green line): Rabbit Anti- Neuroligin 2 antibody (SL11098R),

Dilution: 1µg/10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE,Dilution: 1µg /test.

