

NLGN2 / Neuroligin 2 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS17116

Specification

NLGN2 / Neuroligin 2 Antibody (C-Terminus) - Product Information

Application IHC, IF
Primary Accession Q8NFZ4
Other Accession 57555

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 90820

NLGN2 / Neuroligin 2 Antibody (C-Terminus) - Additional Information

Gene ID 57555

Other Names

NLGN2, KIAA1366, Neuroligin 2, Neuroligin-2

Target/Specificity

NLGN2 antibody is human, mouse and rat reactive. At least two isoforms are known to exist; this antibody will detect both isoforms. NLGN2 antibody is predicted to not cross-react with other members of the NLGN protein family.

Reconstitution & Storage

PBS, 0.02% sodium azide. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

NLGN2 / Neuroligin 2 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

NLGN2 / Neuroligin 2 Antibody (C-Terminus) - Protein Information

Name NLGN2

Synonyms KIAA1366

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. Promotes clustering of postsynaptic LHFPL4 (By similarity). 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 (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Postsynaptic cell membrane. 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 (By similarity).

Tissue Location

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

NLGN2 / Neuroligin 2 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

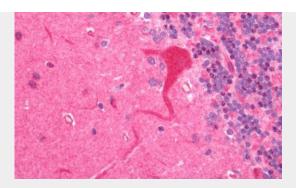
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

NLGN2 / Neuroligin 2 Antibody (C-Terminus) - Images

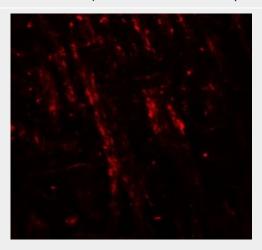


Immunohistochemistry of NLGN2 in mouse brain tissue with NLGN2 antibody at 5 ug/ml.





Human Brain, Cerebellum: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence of NLGN2 in mouse brain tissue with NLGN2 antibody at 20 ug/ml.

NLGN2 / Neuroligin 2 Antibody (C-Terminus) - Background

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 (By similarity).

NLGN2 / Neuroligin 2 Antibody (C-Terminus) - References

Jamain S., et al. Nat. Genet. 34:27-29(2003).

Nagase T., et al. DNA Res. 7:65-73(2000).

Irie M., et al. Science 277:1511-1515(1997).

Suckow A.T., et al. Endocrinology 149:6006-6017(2008).

Bottos A., et al. Proc. Natl. Acad. Sci. U.S.A. 106:20782-20787(2009).