10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-Neuroligin 2 Antibody

Peptide-affinity purified goat antibody

Catalog # AF1723a

Specification

Goat Anti-Neuroligin 2 Antibody - Product Information

Application	**WB, IHC, IF, FC**
Primary Accession	Q8NFZ4
Other Accession	NP_065846, 57555, 216856 (mouse), 117096 (rat)
Reactivity	**Human, Rat**
Predicted	**Mouse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**90820**

Goat Anti-Neuroligin 2 Antibody - Additional Information

Gene ID 57555

Other Names
Neuroligin-2, NLGN2, KIAA1366

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Neuroligin 2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Neuroligin 2 Antibody - 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

Goat Anti-Neuroligin 2 Antibody - Protocols

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

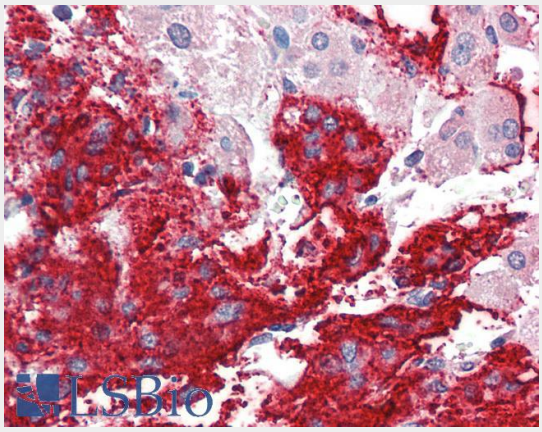
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Neuroligin 2 Antibody - Images

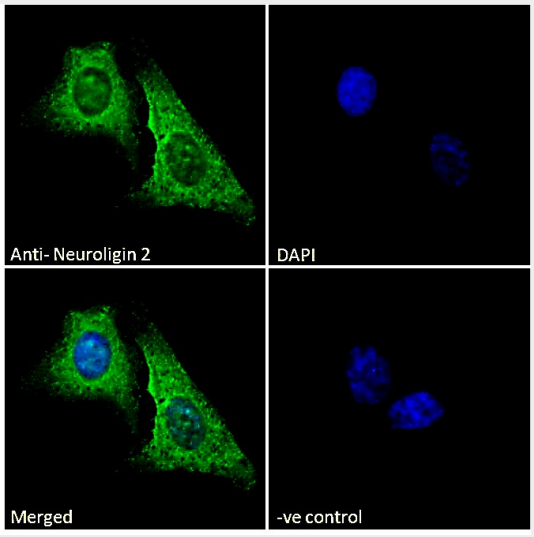


EB07663 (2µg/ml) staining of Human Pancrease lysate (35µg protein in RIPA buffer). Detected by

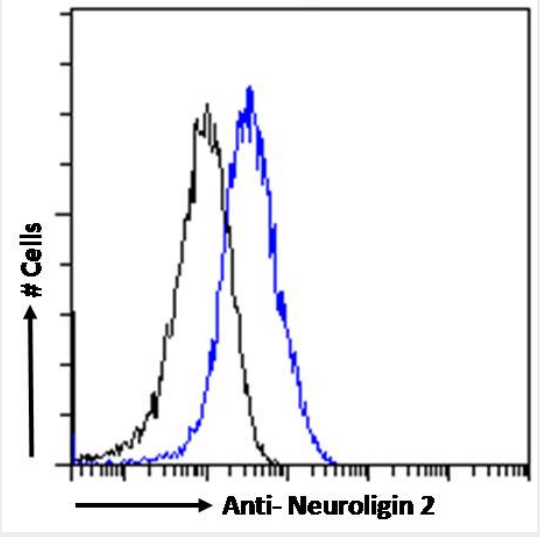
chemiluminescence.



EB07663 (5µg/ml) staining of paraffin embedded Human Adrenal Gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. **This data is from a previous batch, not on sale.**



EB07663 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing mitochondria/cytoplasmic staining. The nuclear sta



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EB07663 Flow cytometric analysis of paraformaldehyde fixed MCF7 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol

Goat Anti-Neuroligin 2 Antibody - Background

This gene encodes a member of a family of neuronal cell surface proteins. Members of this family may act as splice site-specific ligands for beta-neurexins and may be involved in the formation and remodeling of central nervous system synapses.

Goat Anti-Neuroligin 2 Antibody - References

Identification of new putative susceptibility genes for several psychiatric disorders by association analysis of regulatory and non-synonymous SNPs of 306 genes involved in neurotransmission and neurodevelopment. Gratac□s M, et al. Am J Med Genet B Neuropsychiatr Genet, 2009 Sep 5. PMID 19086053.
Mutations of the X-linked genes encoding neuroligins NLGN3 and NLGN4 are associated with autism. Jamain S, et al. Nat Genet, 2003 May. PMID 12669065.
Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.
Synapse formation: if it looks like a duck and quacks like a duck .... Cantallops I, et al. Curr Biol, 2000 Sep 7. PMID 10996085.
Neuroligin expressed in nonneuronal cells triggers presynaptic development in contacting axons. Scheiffele P, et al. Cell, 2000 Jun 9. PMID 10892652.