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Anti-Neuroligin 1 Antibody

Catalog # AP53827

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q8N2Q7
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	96368

Additional Information

Gene ID	22871
Other Names	KIAA1070; Neuroligin-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Neuroligin 1. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

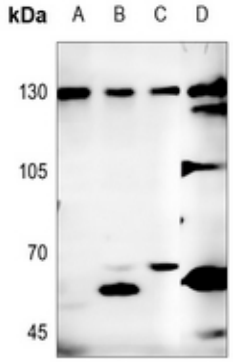
Name	NLGN1
Synonyms	KIAA1070
Function	Cell surface protein involved in cell-cell-interactions via its interactions with neurexin family members. Plays a role in synapse function and synaptic signal transmission, and probably mediates its effects by recruiting and clustering other synaptic proteins. May promote the initial formation of synapses, but is not essential for this. In vitro, triggers the de novo formation of presynaptic structures. May be involved in specification of excitatory synapses. Required to maintain wakefulness quality and normal synchrony of cerebral cortex activity during wakefulness and sleep (By similarity). The protein is involved in nervous system development.
Cellular Location	Cell membrane; Single-pass type I membrane protein. Postsynaptic density {ECO:0000250|UniProtKB:Q62765}. Synaptic cleft {ECO:0000250|UniProtKB:Q62765}. Synaptic cell membrane {ECO:0000250|UniProtKB:Q62765}; Single-pass type I membrane protein. Cell

projection, dendrite {ECO:0000250|UniProtKB:Q62765}. Synapse {ECO:0000250|UniProtKB:Q62765} Note=Enriched in synaptic plasma membranes and clustered in synaptic clefts and postsynaptic densities. Colocalized with DLG4/PSD-95 and GRIN1/NMDAR1. Localizes to dendritic membrane {ECO:0000250|UniProtKB:Q62765}

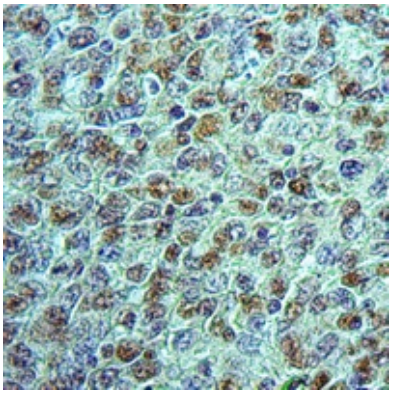
Tissue Location

Expressed in the blood vessel walls (at protein level). Highly expressed in brain through prenatal stages, and at lower levels in pancreas islet beta cells.

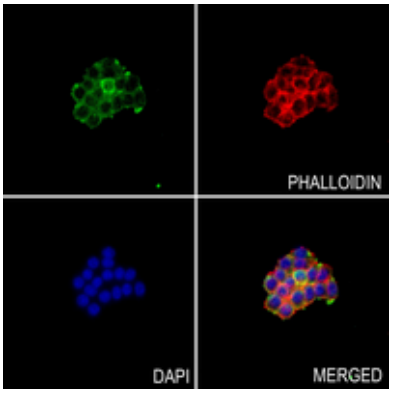
Images



Western blot analysis of Neuroligin 1 expression in HEK293T (A), H446 (B), A549 (C), rat muscle (D) whole cell lysates. (Predicted band size: 96 kD; Observed band size: 130 kD)



Immunohistochemical analysis of Neuroligin 1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Neuroligin 1 staining in MDAMB231 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).