

Nsg1 / Neep21 Antibody (N-Term)
Peptide-affinity purified goat antibody
Catalog # AF3808a**Specification**

Nsg1 / Neep21 Antibody (N-Term) - Product Information

Application	WB
Primary Accession	P42857
Other Accession	NP_077042.2 , 27065 , 18196 (mouse) , 25247 (rat)
Reactivity	Mouse
Predicted	Human, Rat, Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	20913

Nsg1 / Neep21 Antibody (N-Term) - Additional Information**Gene ID** 27065**Other Names**

Neuron-specific protein family member 1, Brain neuron cytoplasmic protein 1, NSG1, D4S234

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 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

Nsg1 / Neep21 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Nsg1 / Neep21 Antibody (N-Term) - Protein Information**Name** NSG1 ([HGNC:18790](#))**Function**

Plays a role in the recycling mechanism in neurons of multiple receptors, including AMPAR, APP and L1CAM and acts at the level of early endosomes to promote sorting of receptors toward a recycling pathway. Regulates sorting and recycling of GRIA2 through interaction with GRIP1 and then contributes to the regulation of synaptic transmission and plasticity by affecting the recycling and targeting of AMPA receptors to the synapse (By similarity). Is required for faithful sorting of L1CAM to axons by facilitating trafficking from somatodendritic early endosome or the recycling

endosome (By similarity). In an other hand, induces apoptosis via the activation of CASP3 in response to DNA damage (PubMed:20599942, PubMed:20878061).

Cellular Location

Membrane {ECO:0000250|UniProtKB:P02683}; Single- pass type II membrane protein {ECO:0000250|UniProtKB:P02683}. Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:P02683}. Endosome membrane {ECO:0000250|UniProtKB:P02683}. Cell projection, dendrite {ECO:0000250|UniProtKB:P02683}. Early endosome membrane {ECO:0000250|UniProtKB:P02683}. Late endosome membrane {ECO:0000250|UniProtKB:P02683}. Lysosome lumen {ECO:0000250|UniProtKB:P02683}. Recycling endosome membrane {ECO:0000250|UniProtKB:P02683}. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P02683}. Golgi apparatus, Golgi stack membrane {ECO:0000250|UniProtKB:P02683}. Endosome, multivesicular body membrane {ECO:0000250|UniProtKB:P02683}. Endoplasmic reticulum membrane. Note=Endocytosed from the cell surface, thus enters into early endosomes, trafficks to late endosomes and degrades in lysosomes (By similarity). Endoplasmic reticulum targeting is essential for apoptosis (PubMed:20599942). Found in both stationary and motile endosomes. A previous study supports a type I membrane protein topology (By similarity) {ECO:0000250|UniProtKB:P02683, ECO:0000250|UniProtKB:Q62092, ECO:0000269|PubMed:20599942}

Nsg1 / Neep21 Antibody (N-Term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Nsg1 / Neep21 Antibody (N-Term) - Images



AF3808a (0.1 µg/ml) staining of fetal Mouse Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Nsg1 / Neep21 Antibody (N-Term) - References

The somatodendritic endosomal regulator NEEP21 facilitates axonal targeting of L1/NgCAM. Yap CC, Wisco D, Kujala P, Lasiecka ZM, Cannon JT, Chang MC, Hirling H, Klumperman J, Winckler B. J Cell Biol. 2008 Feb 25;180(4):827-42. PMID: 18299352