

NEEP21 Polyclonal Antibody Catalog # AP71211

Specification

NEEP21 Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P42857
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

NEEP21 Polyclonal Antibody - Additional Information

Gene ID 27065

Other Names

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

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.

IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

NEEP21 Polyclonal Antibody - 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

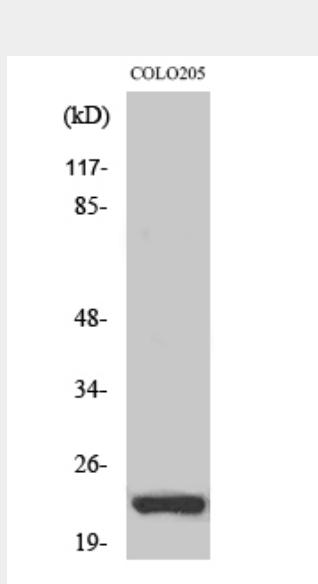
{ECO:0000250|UniProtKB:P02683} Endosome membrane {ECO:0000250|UniProtKB:P02683}. Cell projection, dendrite {ECO:0000250|UniProtKB:P02683}. Early endosome membrane {ECO:0000250|UniProtKB:P02683}. Late endosome membrane {ECO:0000250|UniProtKB:P02683}. Lysosome lumen {ECO:0000250|UniProtKB:P02683}. Recycling 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}

NEEP21 Polyclonal Antibody - Protocols

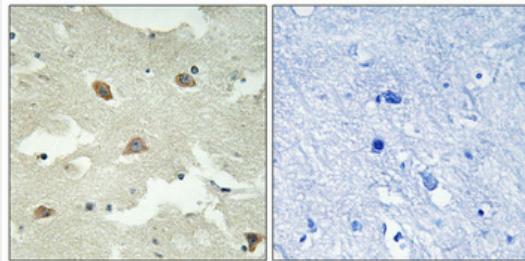
Provided below are standard protocols that you may find useful for product applications.

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

NEEP21 Polyclonal Antibody - Images



Western Blot analysis of various cells using NEEP21 Polyclonal Antibody diluted at 1:2000



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

NEEP21 Polyclonal Antibody - Background

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).