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

NEEP21 Polyclonal Antibody

Catalog # AP71211

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P42857
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20913

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~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

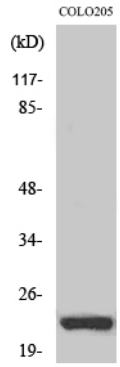
Name	NSG1 (HGNC:18790)
Function	Plays a role in the recycling mechanism in neurons of multiple receptors, including AMPAR, APP and L1CAM and acts at the level of early endosomes to promote sorting of receptors toward a recycling pathway. Regulates sorting and recycling of GRIA2 through interaction with 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 degradates 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}

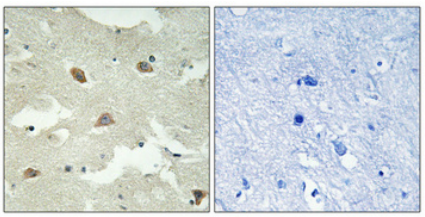
Background

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).

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) obtaned from antibody was pre-absorbed by immunogen peptide.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.