

**NSG1/D4S234E Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP55451****Specification**

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**NSG1/D4S234E Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	<a href="#">P42857</a>
Reactivity	Rat, Cow
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20913

**NSG1/D4S234E Polyclonal Antibody - Additional Information****Gene ID 27065****Other Names**

Neuronal vesicle trafficking-associated protein 1, Neuron-enriched endosomal protein of 21 kDa, Neuron-specific protein family member 1  
{ECO:0000312|HGNC:HGNC:18790}, NSG1  
([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=18790](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=18790)  
target="\_blank">HGNC:18790</a>)

**Format**

0.01M TBS(pH7.4) with 1% BSA, 0.09%  
(W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**NSG1/D4S234E 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:<a href="http://www.uniprot.org/citations/20599942" target="\_blank">20599942</a>, PubMed:<a href="http://www.uniprot.org/citations/20878061" target="\_blank">20878061</a>).

### 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/D4S234E 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](#)