

**D4S234E Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13496a****Specification**

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**D4S234E Antibody (N-term) Blocking peptide - Product Information**Primary Accession [P42857](#)**D4S234E Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 27065**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13496a was selected from the N-term region of D4S234E. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**D4S234E Antibody (N-term) Blocking peptide - 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}

### **D4S234E Antibody (N-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **D4S234E Antibody (N-term) Blocking peptide - Images**

### **D4S234E Antibody (N-term) Blocking peptide - Background**

The specific function of the protein remains unknown.

### **D4S234E Antibody (N-term) Blocking peptide - References**

Kudoh, T., et al. Exp. Cell Res. 316(17):2849-2858(2010)Steiner, P., et al. J. Cell Biol. 157(7):1197-1209(2002)Carlock, L., et al. Brain Res. Mol. Brain Res. 42(2):202-212(1996)