

Product datasheet for **TR501513**

Nsg1 Mouse shRNA Plasmid (Locus ID 18196)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Nsg1 Mouse shRNA Plasmid (Locus ID 18196)
Locus ID:	18196
Synonyms:	m234; Neep21; p21
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Nsg1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 18196). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC008272 , NM_010942 , NM_001359090 , NM_001359091 , NM_001359092 , NM_010942.1 , NM_010942.2 , NM_010942.3 , NM_010942.4
UniProt ID:	Q62092
Summary:	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 (PubMed:15187090, PubMed:12070131, PubMed:21084623, PubMed:16037816). 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 (PubMed:16037816). 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 (By similarity).[UniProtKB/Swiss-Prot Function]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).