

## **Product datasheet for TG516880**

## NIgn2 Mouse shRNA Plasmid (Locus ID 216856)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Nlgn2 Mouse shRNA Plasmid (Locus ID 216856)

**Locus ID:** 216856

Synonyms: NL2; NLG2

**Vector:** pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

**Components:** Nlgn2 - Mouse, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 216856).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 198862, NM 198862.1, NM 198862.2, BC056478, BC156101, BC156963, NM 001364137

UniProt ID: Q69ZK9

**Summary:** Transmembrane scaffolding protein involved in cell-cell interactions via its interactions with

neurexin family members. Mediates cell-cell interactions both in neurons and in other types of cells, such as Langerhans beta cells. Mediates cell-cell interactions between Langerhans beta cells and modulates insulin secretion (By similarity). Plays a role in synapse function and synaptic signal transmission, especially via gamma-aminobutyric acid receptors (GABA(A) receptors). Functions by recruiting and clustering synaptic proteins. Promotes clustering of

postsynaptic GABRG2 and GPHN. Promotes clustering of postsynaptic LHFPL4  $\,$ 

(PubMed:29742426). Modulates signaling by inhibitory synapses, and thereby plays a role in controlling the ratio of signaling by excitatory and inhibitory synapses and information processing. Required for normal signal amplitude from inhibitory synapses, but is not essential for normal signal frequency. May promote the initial formation of synapses, but is not essential for this. In vitro, triggers the de novo formation of presynaptic structures.

[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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



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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).