

## **Product datasheet for TR710516**

## Nrxn1 Rat shRNA Plasmid (Locus ID 60391)

## **Product data:**

**Product Type:** shRNA Plasmids

Product Name: Nrxn1 Rat shRNA Plasmid (Locus ID 60391)

Locus ID: 60391
Synonyms: Nrxn1b

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Nrxn1 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

60391). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>NM 021767, NM 021767.1, NM 021767.2</u>

UniProt ID: Q63372

**Summary:** This gene encodes a single-pass type I membrane protein that belongs to the neurexin

family. Neurexins are synaptic transmembrane receptors that bind endogenous ligands that include neuroligins, dystroglycan, and neurexophilins. Neurexin complexes are required for efficient neurotransmission and are involved in synaptogenesis. In vertebrates, alternate promoter usage results in multiple isoform classes, of which the alpha and beta classes are the best characterized. In humans, allelic variants in this gene are associated with Pitt-

Hopkins-like syndrome-2, while deletions have been associated with autism and schizophrenia. Mouse knockouts display decreased spontaneous and evoked vesicle release

resulting in impaired synaptic transmission. In addition, knockout mice show altered social approach, reduced social investigation, reduced locomotor activity, and in males, increased

aggression. [provided by RefSeq, Nov 2016]

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).