

## **Product datasheet for TL312608**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## NMDAR2C (GRIN2C) Human shRNA Plasmid Kit (Locus ID 2905)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: NMDAR2C (GRIN2C) Human shRNA Plasmid Kit (Locus ID 2905)

Locus ID: 2905

Synonyms: GluN2C; NMDAR2C; NR2C

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** GRIN2C - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 2905).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 000835, NM 001278553, NR 103735, NM 000835.1, NM 000835.2, NM 000835.3,

NM 000835.4, NM 001278553.1, BC031077, BC041128, BC059384, BC140801, BC144586,

BM686026, NM 000835.6

UniProt ID: Q14957

**Summary:** This gene encodes a subunit of the N-methyl-D-aspartate (NMDA) receptor, which is a

subtype of ionotropic glutamate receptor. NMDA receptors are found in the central nervous system, are permeable to cations and have an important role in physiological processes such as learning, memory, and synaptic development. The receptor is a tetramer of different subunits (typically heterodimer of subunit 1 with one or more of subunits 2A-D), forming a channel that is permeable to calcium, potassium, and sodium, and whose properties are determined by subunit composition. Alterations in the subunit composition of the receptor are associated with pathophysiological conditions such as Parkinson's disease, Alzheimer's disease, depression, and schizophrenia. Alternative splicing results in multiple transcript

variants. [provided by RefSeq, Jun 2013]

**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>.







## 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).