

Product datasheet for **TR312615**

GRID2 Human shRNA Plasmid Kit (Locus ID 2895)

Product data:

Product Type:	shRNA Plasmids
Product Name:	GRID2 Human shRNA Plasmid Kit (Locus ID 2895)
Locus ID:	2895
Synonyms:	GluD2; SCAR18
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	GRID2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2895). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001286838 , NM_001510 , NM_001510.1 , NM_001510.2 , NM_001510.3 , NM_001286838.1 , BC099652 , BC099653 , BC099654 , NM_001510.4
UniProt ID:	O43424
Summary:	The protein encoded by this gene is a member of the family of ionotropic glutamate receptors which are the predominant excitatory neurotransmitter receptors in the mammalian brain. The encoded protein is a multi-pass membrane protein that is expressed selectively in cerebellar Purkinje cells. A point mutation in the mouse ortholog, associated with the phenotype named 'lurcher', in the heterozygous state leads to ataxia resulting from selective, cell-autonomous apoptosis of cerebellar Purkinje cells during postnatal development. Mice homozygous for this mutation die shortly after birth from massive loss of mid- and hindbrain neurons during late embryogenesis. This protein also plays a role in synapse organization between parallel fibers and Purkinje cells. Alternate splicing results in multiple transcript variants encoding distinct isoforms. Mutations in this gene cause cerebellar ataxia in humans. [provided by RefSeq, Apr 2014]
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).