

Product datasheet for TR301712

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SHANK2 Human shRNA Plasmid Kit (Locus ID 22941)

Product data:

Product Type: shRNA Plasmids

Product Name: SHANK2 Human shRNA Plasmid Kit (Locus ID 22941)

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Synonyms: AUTS17; CORTBP1; CTTNBP1; ProSAP1; SHANK; SPANK-3

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: SHANK2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

22941). 5µg purified plasmid DNA per construct

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

RefSeq: NM 012309, NM 133266, NR 110766, NM 012309.1, NM 012309.2, NM 012309.3,

NM 012309.4, NM 133266.1, NM 133266.2, NM 133266.3, BC041371, BC093885, BC112097,

BC113876, BC114484, BC143389, BC168372, NM 012309.5, NM 133266.5

UniProt ID: Q9UPX8

Summary: This gene encodes a protein that is a member of the Shank family of synaptic proteins that

may function as molecular scaffolds in the postsynaptic density of excitatory synapses. Shank proteins contain multiple domains for protein-protein interaction, including ankyrin repeats, and an SH3 domain. This particular family member contains a PDZ domain, a consensus sequence for cortactin SH3 domain-binding pentides and a sterile alpha motif. The

sequence for cortactin SH3 domain-binding peptides and a sterile alpha motif. The

alternative splicing demonstrated in Shank genes has been suggested as a mechanism for regulating the molecular structure of Shank and the spectrum of Shank-interacting proteins in the postsynaptic densities of the adult and developing brain. Alterations in the encoded protein may be associated with susceptibility to autism spectrum disorder. Alternative

splicing results in multiple transcript variants. [provided by RefSeq, Feb 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 <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).