

Product datasheet for TR514843

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Rnf112 Mouse shRNA Plasmid (Locus ID 22671)

Product data:

Product Type: shRNA Plasmids

Product Name: Rnf112 Mouse shRNA Plasmid (Locus ID 22671)

Locus ID: 22671

Synonyms: bfp; neurolastin; Zfp179; ZNF179

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Rnf112 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

22671). 5µg purified plasmid DNA per construct

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

RefSeq: BC013139, BC037118, NM 001291024, NM 009548, NM 009548.1, NM 009548.2,

NM 009548.3, NM 001291024.1, NM 001359130

UniProt ID: Q96DY5

Summary: E3 ubiquitin-protein ligase that plays an important role in neuronal differentiation, including

neurogenesis and gliogenesis, during brain development. During embryonic development initiates neuronal differentiation by inducing cell cycle arrest at the G0/G1 phase through upregulation of cell-cycle regulatory proteins (PubMed:21566658, PubMed:28684796). Plays a role not only in the fetal period during the development of the nervous system, but also in the adult brain, where it is involved in the maintenance of neural functions and protection of

the nervous tissue cells from oxidative stress-induced damage (PubMed:27918959, PubMed:26792191, PubMed:26951452). Exhibits GTPase and E3 ubiquitin-protein ligase activities. Regulates dendritic spine density and synaptic neurotransmission; its ability to hydrolyze GTP is involved in the maintenance of dendritic spine density (PubMed:26212327).

[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>.





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).