

## **Product datasheet for TR504549**

## Firt3 Mouse shRNA Plasmid (Locus ID 71436)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Firt3 Mouse shRNA Plasmid (Locus ID 71436)

**Locus ID:** 71436

**Synonyms:** 5530600M07Rik; C430047l10Rik; mKIAA1469

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Components: Firt3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

71436). 5µg purified plasmid DNA per construct

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

RefSeq: BC052043, NM 001172160, NM 178382, NM 001172160.1, NM 178382.1, NM 178382.2,

NM 178382.3, NM 178382.4

UniProt ID: Q8BGT1

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## Summary:

Functions in cell-cell adhesion, cell migration and axon guidance, exerting an attractive or repulsive role depending on its interaction partners (PubMed:19056886, PubMed:25374360). Plays a role in the spatial organization of brain neurons (PubMed:25374360). Plays a role in vascular development in the retina (PubMed:25374360). Plays a role in cell-cell adhesion via its interaction with ADGRL3 and probably also other latrophilins that are expressed at the surface of adjacent cells (PubMed:22405201, PubMed:25374360). Interaction with the intracellular domain of ROBO1 mediates axon attraction towards cells expressing NTN1 (PubMed:24560577). Mediates axon growth cone collapse and plays a repulsive role in neuron guidance via its interaction with UNC5B, and possibly also other UNC-5 family members (PubMed:21673655, PubMed:25374360). Promotes neurite outgrowth (in vitro) (By similarity). Mediates cell-cell contacts that promote an increase both in neurite number and in neurite length (By similarity). Plays a role in the regulation of the density of glutamaergic synapses (PubMed:22405201). Plays a role in fibroblast growth factor-mediated signaling cascades (PubMed:16872596). Required for normal morphogenesis during embryonic development, but not for normal embryonic patterning (PubMed:19056886). Required for normal ventral closure, headfold fusion and definitive endoderm migration during embryonic development (PubMed:18448090). Required for the formation of a normal basement membrane and the maintenance of a normal anterior visceral endoderm during embryonic development (PubMed:19056886).[UniProtKB/Swiss-Prot Function]

shRNA Design:

Performance Guaranteed: 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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).