

## **Product datasheet for TL514450**

## i i oddet datasiieet ioi i Esi ++50

## Sh3rf1 Mouse shRNA Plasmid (Locus ID 59009)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Sh3rf1 Mouse shRNA Plasmid (Locus ID 59009)

**Locus ID:** 59009

**Synonyms:** 2200003J05Rik; Posh; R75531; Sh3md2

**Vector:** pGFP-C-shLenti (TR30023)

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** Sh3rf1 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 59009).

5µg purified plasmid DNA per construct

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

RefSeq: <u>BC060113</u>, <u>BC060696</u>, <u>NM 021506</u>, <u>NM 198678</u>, <u>NM 021506.1</u>, <u>NM 021506.2</u>

UniProt ID: Q69ZI1

**Summary:** Has E3 ubiquitin-protein ligase activity. In the absence of an external substrate, it can catalyze

self-ubiquitination. Stimulates ubiquitination of potassium channel KCNJ1, enhancing its dynamin-dependent and clathrin-independent endocytosis (By similarity). Acts as a scaffold protein that coordinates with MAPK8IP1/JIP1 in organizing different components of the JNK pathway, including RAC1 or RAC2, MAP3K11/MLK3 or MAP3K7/TAK1, MAP2K7/MKK7, MAPK8/JNK1 and/or MAPK9/JNK2 into a functional multiprotein complex to ensure the effective activation of the JNK signaling pathway. Regulates the differentiation of CD4(+) and CD8(+) T-cells and promotes T-helper 1 (Th1) cell differentiation. Regulates the activation of MAPK8/JNK1 and MAPK9/JNK2 in CD4(+) T-cells and the activation of MAPK8/JNK1 in CD8(+) T-cells (PubMed:23963642, PubMed:27084103, PubMed:9482736). Plays a crucial role in the migration of neocortical neurons in the developing brain. Controls proper cortical neuronal migration and the formation of proximal cytoplasmic dilation in the leading process (PCDLP) in migratory neocortical neurons by regulating the proper localization of activated RAC1 and

F-actin assembly (PubMed:22959435).[UniProtKB/Swiss-Prot Function]



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com





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 <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>.

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).