

## **Product datasheet for TR515747**

## Ackr3 Mouse shRNA Plasmid (Locus ID 12778)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Ackr3 Mouse shRNA Plasmid (Locus ID 12778)

**Locus ID:** 12778

Synonyms: AW541270; Cmkor1; CXC-R7; CXCR-7; Cxcr7; RDC-1; Rdc1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Ackr3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

12778). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC015254</u>, <u>NM 001271607</u>, <u>NM 007722</u>, <u>NM 007722.1</u>, <u>NM 007722.2</u>, <u>NM 007722.2</u>, <u>NM 007722.3</u>,

NM 007722.4, NM 001271607.1

UniProt ID: P56485

**Summary:** Atypical chemokine receptor that controls chemokine levels and localization via high-affinity

chemokine binding that is uncoupled from classic ligand-driven signal transduction cascades, resulting instead in chemokine sequestration, degradation, or transcytosis. Also known as interceptor (internalizing receptor) or chemokine-scavenging receptor or chemokine decoy receptor. Acts as a receptor for chemokines CXCL11 and CXCL12/SDF1. Chemokine binding does not activate G-protein-mediated signal transduction but instead induces beta-arrestin recruitment, leading to ligand internalization and activation of MAPK signaling pathway. Required for regulation of CXCR4 protein levels in migrating interneurons, thereby adapting their chemokine responsiveness. In glioma cells, transduces signals via MEK/ERK pathway, mediating resistance to apoptosis. Promotes cell growth and survival. Not involved in cell migration, adhesion or proliferation of normal hematopoietic progenitors but activated by CXCL11 in malignant hemapoietic cells, leading to phosphorylation of ERK1/2 (MAPK3/MAPK1) and enhanced cell adhesion and migration. Plays a regulatory role in CXCR4-mediated activation of cell surface integrins by CXCL12. Required for heart valve development.

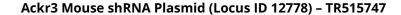
[UniProtKB/Swiss-Prot Function]



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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).