

Product datasheet for **TR500383**

Cxcr4 Mouse shRNA Plasmid (Locus ID 12767)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Cxcr4 Mouse shRNA Plasmid (Locus ID 12767)
Locus ID:	12767
Synonyms:	b2b220Clo; CD184; Cmkar4; LESTR; PB-CKR; PBSF/SDF-1; Sdf1r
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cxcr4 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 12767). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC031665 , BC098322 , NM_009911 , NM_009911.1 , NM_009911.2 , NM_009911.3 , NM_001356509
UniProt ID:	P70658
Summary:	Receptor for the C-X-C chemokine CXCL12/SDF-1 that transduces a signal by increasing intracellular calcium ion levels and enhancing MAPK1/MAPK3 activation (PubMed:8962122, PubMed:9295051, PubMed:9103415). Involved in the AKT signaling cascade (By similarity). Plays a role in regulation of cell migration, e.g. during wound healing. Acts as a receptor for extracellular ubiquitin; leading to enhanced intracellular calcium ions and reduced cellular cAMP levels. Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes (By similarity). Involved in hematopoiesis and in cardiac ventricular septum formation (PubMed:9634237, PubMed:9634238, PubMed:9689100). Also plays an essential role in vascularization of the gastrointestinal tract, probably by regulating vascular branching and/or remodeling processes in endothelial cells (PubMed:9634237). Involved in cerebellar development. In the CNS, could mediate hippocampal-neuron survival (PubMed:9634238, PubMed:9689100).[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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

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).