

## **Product datasheet for TL509783**

## Slamf6 Mouse shRNA Plasmid (Locus ID 30925)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Slamf6 Mouse shRNA Plasmid (Locus ID 30925)

**Locus ID:** 30925

Synonyms: KAL1; KAL1b; Ly108; NTB-A; NTBA; SF2000

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

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** Slamf6 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 30925).

5µg purified plasmid DNA per construct

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

RefSeq: <u>BC030031</u>, <u>NM 001347186</u>, <u>NM 001347187</u>, <u>NM 030710</u>, <u>NM 030710.1</u>, <u>NM 030710.2</u>,

NM 030710.3

UniProt ID: Q9ET39

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Summary:

Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2 (PubMed:19648922). Triggers cytolytic activity only in natural killer cells (NK) expressing high surface densities of natural cytotoxicity receptors (By similarity). Positive signaling in NK cells implicates phosphorylation of VAV1. NK cell activation seems to depend on SH2D1B and not on SH2D1A (By similarity). In conjunction with SLAMF1 controls the transition between positive selection and the subsequent expansion and differentiation of the thymocytic natural killer T (NKT) cell lineage (PubMed:18031695). Promotes T cell differentiation into a helper T-cell Th17 phenotype leading to increased IL-17 secretion; the costimulatory activity requires SH2D1A (By similarity). Promotes recruitment of RORC to the IL-17 promoter (By similarity). In conjunction with SLAMF1 and CD84/SLAMF5 may be a negative regulator of the humoral immune response (PubMed:25926831). In the absence of SH2D1A/SAP can transmit negative signals to CD4(+) T-cells and NKT cells. Negatively regulates germinal center formation by inhibiting T-cell:B-cell adhesion; the function probably implicates increased association with PTPN6/SHP-1 via ITSMs in absence of SH2D1A/SAP (PubMed:22683125). However, reported to mediated T-cell adhesion, to participate in stable T-cell:B-cell interactions and to be involved in maintaining B-cell tolerance in germinal centers and in preventing autoimmunity (PubMed:20153220, PubMed:25801429). Involved in regulation of autoimmunity. Isoform 3 may be suppressor of pathogenic T-cell proliferation (PubMed:21422172).[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).