

Product datasheet for MR224443

Slamf6 (NM_030710) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Slamf6 (NM_030710) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Slamf6

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

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >MR224443 representing NM_030710

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR224443 representing NM_030710

Red=Cloning site Green=Tags(s)

MAVSRAPAPDSACQRMVWLFPLVFCLGSGSEVSQSSSDPQLMNGVLGESAVLPLKLPAGKIANIIIWNYE WEASQVTALVINLSNPESPQIMNTDVKKRLNITQSYSLQISNLTMADTGSYTAQITTKDSEVITFKYILR VFERLGNLETTNYTLLLENGTCQIHLACVLKNQSQTVSVEWQATGNISLGGPNVTIFWDPRNSGDQTYVC RAKNAVSNLSVSVSTQSLCKGVLTNPPWNAVWFMTTISIISAVILIFVCWSIHVWKRRGSLPLTSQHPES SQSTDGPGSPGNTVYAQVTRPMQEMKIPKPIKNDSMTIYSIVNHSREAEYS

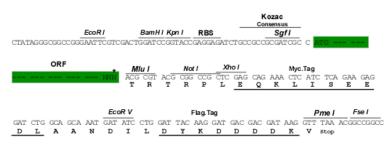
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9020 e09.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM 030710

ORF Size: 993 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>

ORIGENE

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: NM 030710.3

RefSeq Size: 2443 bp

RefSeq ORF: 996 bp Locus ID: 30925

UniProt ID: Q9ET39

1 79.54 cM Cytogenetics:

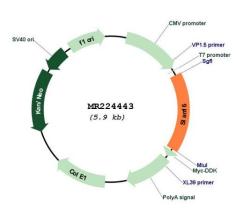
MW: 36.9 kDa



Gene 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]

Product images:



Circular map for MR224443