

## Product datasheet for **RC236422**

### SLAMF7 (NM\_001282596) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SLAMF7 (NM\_001282596) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SLAMF7  
**Synonyms:** 19A; CD319; CRACC; CS1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC236422 representing NM\_001282596  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGGTTCCCAACATGCCTCACCCCTCATCTATATCCTTTGGCAGCTCACAGAGCACCTGTCAAAGC  
CTAAAGTCACCATGGGTCTGCAGAGCAATAAGAATGGCACCTGTGTGACCAATCTGACATGCTGCATGGA  
ACATGGGGAAGAGGATGTGATTTATACCTGGAAGGCCCTGGGCAAGCAGCCAATGAGTCCATAATGGG  
TCCATCTCCCATCTCCTGGAGATGGGAGAAAAGTGATATGACCTTCATCTGCGTTGCCAGGAACCTG  
TCAGCAGAAACTTCTCAAGCCCCATCCTTGCCAGGAAGCTCTGTGAAGGTGCTGCTGATGCCAGATTC  
CTCCATGGTCTCCTGTGTCTCCTGTTGGTGCCCTCCTGCTCAGTCTCTTTGACTGGGCTATTTCTT  
TGGTTTCTGAAGAGAGAGACAAGAAGAGAACAATCCTAAAGGAAGATCCAGCAAAATACGGTTTACTCC  
ACTGTGGAATACCGAAAAAGATGGAAAATCCCCACTCACTGCTCAGATGCCAGACACCAAGGCTAT  
TTGCCTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC236422 representing NM\_001282596  
**Red=Cloning site Green=Tags(s)**

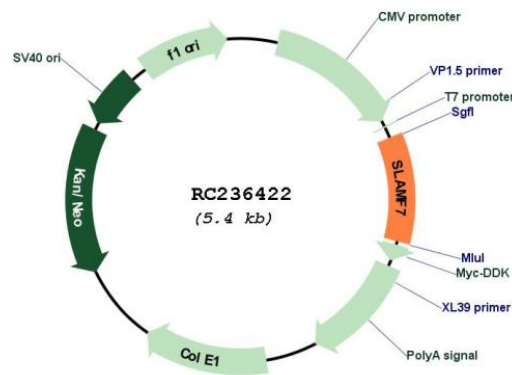
MAGSPTCLTIYILWQLTEHLSKPKVTMGLQSNKNGTCVTNLTCCMEHGEEDVIYTWKALGQAANESHNG  
SILPISWRWGESDMTFICVARNPVSRNFSPIILARKLCEGAADDPDSSMVLLCLLLVPLLLSLFVLGLFL  
WFLKRERQEENPKGRSSKYGLLHCGNTEKDGSPLTAHDARHTKAICL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001282596

**ORF Size:** 567 bp

**OTI Disclaimer:** 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. [More info](#)

**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.

**RefSeq:** [NM\\_001282596.2](#)

**RefSeq Size:** 2483 bp

**RefSeq ORF:** 570 bp

**Locus ID:** 57823

**Cytogenetics:** 1q23.3

**Protein Families:** Druggable Genome, Transmembrane

**MW:** 21.4 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. Isoform 1 mediates NK cell activation through a SH2D1A-independent extracellular signal-regulated ERK-mediated pathway (PubMed:11698418). Positively regulates NK cell functions by a mechanism dependent on phosphorylated SH2D1B. Downstream signaling implicates PLCG1, PLCG2 and PI3K (PubMed:16339536). In addition to heterotypic NK cells-target cells interactions also homotypic interactions between NK cells may contribute to activation. However, in the absence of SH2D1B, inhibits NK cell function. Acts also inhibitory in T-cells (By similarity). May play a role in lymphocyte adhesion (PubMed:11802771). In LPS-activated monocytes negatively regulates production of proinflammatory cytokines (PubMed:23695528).[UniProtKB/Swiss-Prot Function]