Product datasheet for RC236550

SLAMF7 (NM_001282589) Human Tagged ORF Clone

Product data:

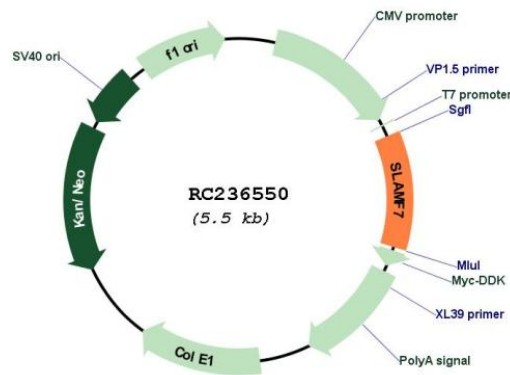|	
Product Type:	Expression Plasmids
Product Name:	SLAMF7 (NM_001282589) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLAMF7
Synonyms:	19A; CD319; CRACC; CS1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC236550 representing NM_001282589 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCTGGTTCCCCAACATGCCTCACCCTCATCTATATCCTTTGGCAGCTCACAGGGTCAGCAGCCTCTG GACCCGTGAAAGAGCTGGTCGGTTCCGTTGGTGGGGCCGTGACTTTCCCCCTGAAGTCCAAAGTAAAGCA AGTTGACTCTATTGTCTGGACCTTCAACACAACCCCTCTTGTCACCATACAGCCAGAAGGGGGCACTATC ATAGTGACCCAAAATCGTAATAGGGAGAGAGTAGACTTCCCAGATGGAGGCTACTCCCTGAAGCTCAGCA AACTGAAGAAGAATGACTCAGGGATCTACTATGTGGGGATATACAGCTCATCACTCCAGCAGCCCTCCAC CCAGGAGTACGTGCTGCATGTCTACGAGTACATTGAAGAGAAGAAGAGAGTGGACATTTGTCGGGAAACT CCTAACATATGCCCCCATTCTGGAGAGAACACAGAGTACGACACAATCCCTCACACTAATAGAACAATCC TAAAGGAAGATCCAGCAAATACGGTTTACTCCACTGTGGAAATACCGAAAAAGATGGAAAATCCCCACTC ACTGCTCACGATGCCAGACACACCAAGGCTATTTGCCTATGAGAATGTTATC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC236550 representing NM_001282589 Red=Cloning site Green=Tags(s) MAGSPTCLTLIYILWQLTGSAASGPVKELVGSVGGAVTFPLKSKVKQVDSIVWTFNTTPLVTIQPEGGTI IVTQNRNRERVDFPDGGYSLKLSKLKKNDSGIYYVGIYSSSLQQPSTQEYVLHVYEYIEEKKRVDICRET PNICPHSGENTEYDTIPHTNRTILKEDPANTVYSTVEIPKKMENPHSLLTMPDTPRLFAYENVI TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Restriction Sites:	SgfI-MluI

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Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf I	ORF	Mlu I
--- GCGATCGC C **ATG** ---//--- **NNN**		ACG CGT ---

Kozac Consensus

EcoR I   BamH I Kpn I   RBS   Sgf I
CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C **ATG** ---- ----

ORF
NNN Mlu I   Not I   Xho I   Myc.Tag
ACG CGT ACG CGG CCG CTC GAG CAG AAA CTC ATC TCA GAA GAG
T   R   T   R   P   L   E   Q   K   L   I   S   E   E

EcoR V   Flag.Tag   Pme I   Fse I
GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TAA ACGGCCGGCC
D   L   A   A   N   D   I   L   D   Y   K   D   D   D   D   K   V   stop

* The last codon before the Stop codon of the ORF

Plasmid Map:

RC236550
(5.5 kb)

ACCN:	NM_001282589
ORF Size:	612 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_001282589.1, NP_001269518.1
RefSeq Size:	2515 bp
RefSeq ORF:	615 bp
Locus ID:	57823
UniProt ID:	Q9NQ25
Cytogenetics:	1q23.3
Protein Families:	Druggable Genome, Transmembrane
MW:	23.2 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]