

Product datasheet for **RG236409**

SLAMF7 (NM_001282591) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLAMF7 (NM_001282591) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: SLAMF7
Synonyms: 19A; CD319; CRACC; CS1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG236409 representing NM_001282591.
Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTGGTTCCCAACATGCCTCACCCCTCATCTATATCCTTTGGCAGCTCACAGAGCACCTGTCAAAG
CCTAAAGTCACCATGGGTCTGCAGAGCAATAAGAATGGCACCTGTGTGACCAATCTGACATGCTGCATG
GAACATGGGGAAGAGGATGTGATTTATACCTGGAAGCCCTGGGGCAAGCAGCAATGAGTCCCATAAT
GGGTCCATCTCCCATCTCCTGGAGATGGGGAGAAAGTGATATGACCTCATCTGCGTTGCCAGGAAC
CCTGTCAGCAGAACTTCTCAAGCCCCATCCTTGCCAGGAAGCTCTGTGAAGAGTACATTGAAGAGAAG
AAGAGAGTGGACATTTGTCGGGAACTCCTAACATATGCCCCATTCTGGAGAGAACACAGAGTACGAC
ACAATCCCTCACACTAATAGAACAATCCTAAAGGAAGATCCAGCAATACGGTTTACTCCACTGTGGAA
ATACCGAAAAAGATGGAAAATCCCCTACTGCTCAGATGCCAGACACACCAAGGCTATTTGCTAT
GAGAATGTTATC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```

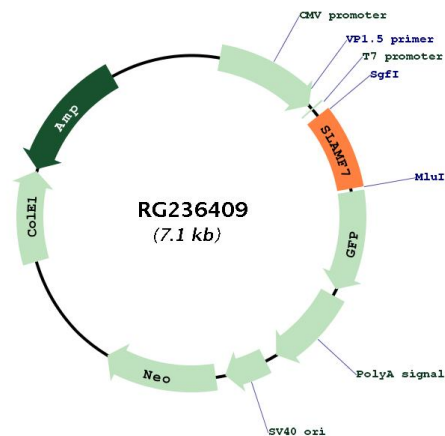
Protein Sequence: >Peptide sequence encoded by RG236409
Blue=ORF Red=Cloning site Green=Tag(s)

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MAGSPTCLTIYILWQLTEHLSKPKVTMGLQSNKNGTCVNTLTCCMEHGEEDVIYTWKALGQAANESHN
GSILPISWRWGESDMTFICVARNPVSRRNFSSPILARKLCEEYIEEKRVVICRETPNICPHSGENTEYD
TIPHTNRITLKEDPANTVYSTVEIPKKMENPHSLLTMPDTPRLFAYENVI
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSRDGGYSSVVDSHMHFKSAIHPISILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
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Restriction Sites: SgfI-MluI



Cloning Scheme:

Plasmid Map:


ACCN: NM_001282591

ORF Size: 564 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).

RefSeq:	<u>NM_001282591.1, NP_001269520.1</u>
RefSeq Size:	2467 bp
RefSeq ORF:	567 bp
Locus ID:	57823
UniProt ID:	<u>Q9NQ25</u>
Cytogenetics:	1q23.3
Protein Families:	Druggable Genome, Transmembrane
MW:	21.8 kDa
Gene Summary:	<p>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]</p>