

Product datasheet for RR211676

Sh2d1a (NM_001109313) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Sh2d1a (NM_001109313) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Sh2d1a
Synonyms: RGD1562408
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR211676 representing NM_001109313
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGATGCGGTGACTGTGTACCACGGCAAATCAGCAGGGAGATGGGGGAGAAGCTTACTCGCTACGG
GGCTGGATGGAAGCTATCTGCTGCGAGACAGCAGAGTGTCCCTGGCGTGTACTGCCTGTGTGTTTTGTA
TCAAGTTACATCTATACGTATCGAGTGTCCAGACAGAAACAGGCTCTTGGAGTCTGAGACAGCACCT
GGGTACATAAAAGATTTTCCGGAAAGTAAAAATCTCATTTCAGCATTTCAGAAGCCAGATCAAGGCA
TCGTAACGCCTCTGCAGTATCCAGTTGAAAAGTCTCGGCTAGGAGTCCACAAGCTCCACAGGGAGAAG
AGATTCTGATATCTGCTTCAAAGCGCCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR211676 representing NM_001109313
Red=Cloning site Green=Tags(s)

MDAVTVYHGKISREMGEKLLLATGLDGSYLLRDESEVPGVYCLCVLYQGYIYTYRVSQTETGWSAETAP
GVHKRFFRQVKNLISAFQKPDQGIPTPLQYPVEKSSARSPQAPTGRRSDICLKAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

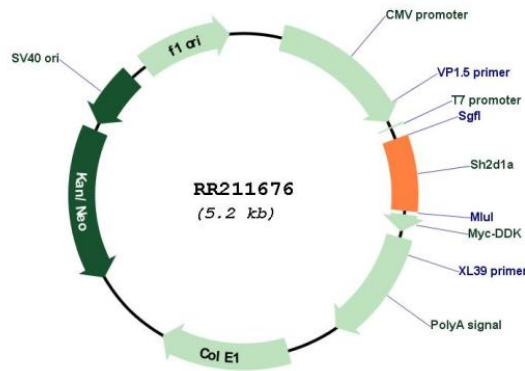


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Cloning Scheme:



Plasmid Map:



ACCN:

NM_001109313

ORF Size:

378 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:	<ol style="list-style-type: none">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:	<u>NM_001109313.2</u> , <u>NP_001102783.2</u>
RefSeq Size:	1236 bp
RefSeq ORF:	381 bp
Locus ID:	501502
UniProt ID:	<u>B2RZ59</u>
Cytogenetics:	Xq35
MW:	14 kDa
Gene Summary:	Cytoplasmic adapter regulating receptors of the signaling lymphocytic activation molecule (SLAM) family such as SLAMF1, CD244, LY9, CD84, SLAMF6 and SLAMF7. In SLAM signaling seems to cooperate with SH2D1B/EAT-2. Initially it has been proposed that association with SLAMF1 prevents SLAMF1 binding to inhibitory effectors including INPP5D/SHIP1 and PTPN11/SHP-2. However, by simultaneous interactions, recruits FYN which subsequently phosphorylates and activates SLAMF1. Positively regulates CD244/2B4- and CD84-mediated natural killer (NK) cell functions. Can also promote CD48-, SLAMF6 -, LY9-, and SLAMF7-mediated NK cell activation. In the context of NK cell-mediated cytotoxicity enhances conjugate formation with target cells (By similarity). May also regulate the activity of the neurotrophin receptors NTRK1, NTRK2 and NTRK3 (PubMed:16223723).[UniProtKB/Swiss-Prot Function]