

## Product datasheet for RN211676

### Sh2d1a (NM\_001109313) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sh2d1a (NM\_001109313) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Sh2d1a  
**Synonyms:** RGD1562408  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN211676 representing NM\_001109313  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGATGCGGTGACTGTGTACCACGGCAAATCAGCAGGGAGATGGGGGAGAAGCTTCTACTCGCTACGG  
 GGCTGGATGGAAGCTATCTGCTGCGAGACGCGAGAGTGTCCCTGGCGTGTACTGCCTGTGTGTTTTGTA  
 TCAAGTTACATCTATACGTATCGAGTGTCCAGACAGAAACAGGCTCTTGGAGTGTGAGACAGCACCT  
 GGGGTACATAAAAGATTTTTCCGGAAAGTAAAAATCTCATTTCAGCATTTCAGAAGCCAGATCAAGGCA  
 TCGTAACGCCTCTGCAGTATCCAGTTGAAAAGTCTCGGCTAGGAGTCCACAAGCTCCACAGGGAGAAG  
 AGATTCTGATATCTGCTTCAAAGCGCCATGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001109313

**Insert Size:** 381 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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).



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**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\\_001109313.2](#), [NP\\_001102783.2](#)

**RefSeq Size:** 1236 bp

**RefSeq ORF:** 381 bp

**Locus ID:** 501502

**UniProt ID:** [B2RZ59](#)

**Cytogenetics:** Xq35

**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]