

## Product datasheet for **MG226695**

### Sh2d1a (NM\_011364) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sh2d1a (NM\_011364) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Sh2d1a  
**Synonyms:** Gm686; SAP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG226695 representing NM\_011364  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATGCAGTGACTGTGTACCACGGCAAATCAGCAGGGAGACCGGGGAGAAGCTTCTACTCGCTACCG  
GGCTGGATGGAAGCTATCTGCTGCGAGACAGCGAGAGTGTCCCTGGCGTGTACTGCCTGTGTGTTTTGTA  
TCAAGTTACATCTACACATATCGAGTGTCCAGACAGAAACAGGTTCTTGGAGTGCCGAGACAGCACCT  
GGAGTACATAAAAGATTTTTCCGAAAGTAAAAATCTCATCTCAGCGTTTCAGAAGCCGGATCAAGGCA  
TCGTGACGCTCTGCAGTATCCAGTTGAAAAGTCTCTGGCAGGGGCCACAAGCTCCACAGGGAGAAG  
AGATTCTGATATCTGCCTGAATGCACCA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG226695 representing NM\_011364  
Red=Cloning site Green=Tags(s)

MDAVTVYHGKISRETGEKLLLATGLDGSYLLRDSSEVPGVYCLCVLYQGYYTYRVSQTETGWSAETAP  
GVHKRFFRKYKNLISAFQKPDQIVTPLQYPVEKSSGRGPQAPTGRRDSDICLNAP

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



[View online »](#)



<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>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).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<p><a href="#">NM_011364.4</a>, <a href="#">NP_035494.1</a></p>
<b>RefSeq Size:</b>	<p>819 bp</p>
<b>RefSeq ORF:</b>	<p>381 bp</p>
<b>Locus ID:</b>	<p>20400</p>
<b>UniProt ID:</b>	<p><a href="#">O88890</a></p>
<b>Cytogenetics:</b>	<p>X A4</p>

**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 (By similarity). Positively regulates CD244/2B4- and CD84-mediated natural killer (NK) cell functions (PubMed:22683124). Can also promote CD48-, SLAMF6-, LY9-, and SLAMF7-mediated NK cell activation (PubMed:19648922). In the context of NK cell-mediated cytotoxicity enhances conjugate formation with target cells (PubMed:22683124). May also regulate the activity of the neurotrophin receptors NTRK1, NTRK2 and NTRK3.[UniProtKB/Swiss-Prot Function]