

## Product datasheet for **RG227858**

### SH2B1 (NM\_001145812) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SH2B1 (NM_001145812) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SH2B1
Synonyms:	PSM; SH2B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG227858 representing NM\_001145812  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAATGGTGCCCTTCCCAGAGGACGGGCTCCCCCTCGTCTCCCCGCTGCCCCACCCCGCCCC  
 CTAGTTGGCGGGAGTTCTGTGAGTCCCACGCCGGCTGCGGCTCTGGACTTTGCCCGCCGTTTTCGCCT  
 CTACCTGGCCTCCCACCCCAATATGCGGGGCCGGGGCCGAGGCTGCCTTCTCCCGCGTTTTGTGAG  
 CTCTTCTGCAGCACTTTGAAGCCGAGGTGGCCCGGCCCTCTGGCTCCCTGTCGCCACCCATCCTGGCTC  
 CCCTGAGCCCTGGTGGGAGATTTGCCACATGACCTGTCCCTTGAGAGCTGCAGGTGGTGGGCCCT  
 GGCTGTGTGGGCCCTTCTCGATCATCTGAGGACCTGGCCGGCCCCCTCCCTTCTCAGTCTTCTCTCC  
 TCTACAACCTCTCAAGCCGAAGCTCAAGAAGCGTTTTCCCTGCGTTCAGTGGTTCGCTGTCCGAG  
 GCTCAGTCCGTGGCATCTCGAGTGGCGGGGACCGTTGACCCTCCCTCCGCTGGGCCCTGGAGAC  
 CTGCTCAGGCCCCAGTCTTAGGTGAAACAGCAACTCCAACCTCTGGCGGGCTGGGACCGTTGGT  
 AGGGGACTGGTCACTGATGGAACGTCCCCTGGGAAAGATGGACTCACCGTTTTGAGAGGCTGAGACTCA  
 GTCGGGGAGGGGGCGCCTTGAAGGATGGAGCAGGGATGGTGCAGAGGGAAGAGCTGCTGAGTTTCATGGG  
 GGCTGAGGAGGCAGCCCCTGACCCAGCCGAGTGGGCCGGGGAGGAGGGGTGGCTGGGCCTCCTTACGGG  
 GGAGGAGGGCAGCCCTCAGTGGCAGAAGTGTGCGCTGCTGCTTGAAGTGAAGGAGAAGGAGGAGGAGAA  
 GTCGCCTGGAGTTCTTTGTACCACCAAGGCCCTCTCGGCCCGACTCAGCATCCCCTGCTTCTATCAC  
 AGAGCTCCGACAACCACAGCCCTGGAGATGCCTGACCGGGAGAACACGTTTGTGGTTAAGGTGGAAGGT  
 CCATCCGAGTATCATGGAGACAGTGGATGCCAGCATGTGAAGGCCTGGTGTCTGACATCCAAGAAT  
 GCCTGAGCCCAGGACCCCTGCCCTGCTACCAGTCCCCGCCCATGACCCTCCCTCTGGCCCTGGGACCTC  
 ATTCTTTACAAGGGAGAACACAGACAGCCTGGAGCTGCCTGCCTGAATCACTCGGAGAGTCTACCCAGC  
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 GCTTCCCCCAGAGTTGCCCCCCGCATCCCCATTGAAGAGGGACCCCAACAGGGACAGTTCATCCCCTC  
 TCAGCCCCCTACCCTCCCTTGGACACTCCGAAACAGCCACAGGGTCTTCTGTTCCAGGGGGAGCCAG  
 AGGGCGGTGAGGGGGACAGCCCCTCTCAGGGTATCCTTGGTTCCACGGGATGCTCTCTCGGCTCAAGGC  
 TGCACAGTTGGTGTGACTGGCGGCACTGGCTCCACGGTGTCTTCTGGTGCGCCAGAGTGAACAAGG  
 CGGGTGAATACGTCCTCACCTTCAACTCCAGGGCAAGGCCAAGCACCTGCGTTTGTGCTGAACGAGG  
 AGGGTCAGTGCCGGTCCAGCACCTGTGGTTCCAGTCCATTTTCGATATGCTCGAGCACTCCGGGTGCA  
 CCCCATCCCTTTGGAGTCGGGAGGCTCCAGTGTGTTGCTTGTGCTGCTGCTGCTGCTGCTGCTGCTGCT  
 CAGCAGGGCCGGGAGCAGGCTGGGAGCCATGCGGGGGTGTGCGAGGGAGATGGATGCCACCCCGATGCC  
 CCTGCACCCTCATGCCCTTCGGAGCGAGTACTGTGTAACCGACCACCTCCCA

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG227858 representing NM\_001145812  
 Red=Cloning site Green=Tags(s)

```
MNGAPSPEDGASPSSPPLPPPPPPSWREFCESHARAAALDFARRFRLYLASHPQYAGPGAEEAFSRRFAE
LFLQHFEAEVARASGSLSPILAPLSPGAEISPHDLSLESCRVGGLAVLGPSSRSEDLAGLPPSSVSSS
STTSSKPKLKKRFSLRVSVGRSVRGSVRGILQWRGTVDPPSSAGPLETSSGPPVLGGNSNSNSGGGAGTVG
RGLVSDGTSPPERWTHRFRERLRLSRGGGALKDGAGMVQREELL SFGMAEEAAPDPAGVGRGGVAGPPSG
GGGQPQWQKCRLLLRSEGEgggsrLEFFVPPKASRPRLSIPCSSITDVRTTTALEMPDRENTFVVKVEG
PSEYIMETVDAQHVKAWSIDIQECLSPGPCPATSPRPMTLPLAPGTSFLTRENTDSLELSCLNHSESLPS
QDLLLLGPSESNDRLSQGAYGGLSDRPSASISPSASIAASHFDSMELLPELPPRIPIIEEGPPTGTVHPL
SAPYPLDTPETATGSFLFQGEPEGGEDQPLSGYPWFHGMRLKAAQLVLTGGTGSHGVLVVRQSETR
RGEYVLTNFQGKAKHLRLSLNEEGQCRVQHLWFQSFIDMLEHFRVHPIPLESGGSSDVVLVSYVPPSSQR
QQGREQAGSHAGVCEGDGCHPDASCTLMFPGASDCVTDHLP
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001145812

**ORF Size:** 2013 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\\_001145812.1](#), [NP\\_001139284.1](#)

**RefSeq Size:** 3145 bp

**RefSeq ORF:** 2016 bp

**Locus ID:** 25970

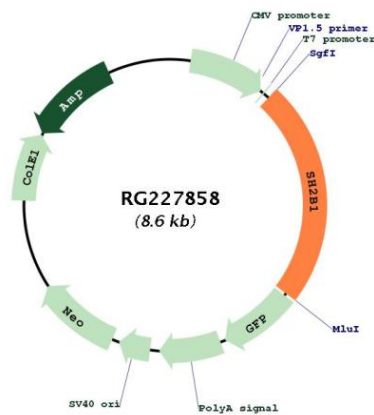
**UniProt ID:** [Q9NRF2](#)

**Cytogenetics:** 16p11.2

**Protein Pathways:** Neurotrophin signaling pathway

**Gene Summary:** This gene encodes a member of the SH2-domain containing mediators family. The encoded protein mediates activation of various kinases and may function in cytokine and growth factor receptor signaling and cellular transformation. Alternatively spliced transcript variants have been described. [provided by RefSeq, Mar 2009]

**Product images:**



Circular map for RG227858