

Product datasheet for **RG227881**

SH2B1 (NM_001145795) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SH2B1 (NM_001145795) 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:

>RG227881 representing NM_001145795
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAATGGTGCCCTTCCCAGAGGACGGGCTCCCCCTCGTCTCCCCCGCTGCCCCACCCCGCCCC
 CTAGTTGGCGGGAGTTCTGTGAGTCCCACGCCGGCTGCGGCTCTGGACTTTGCCCGCCGTTTTCGCCT
 CTACCTGGCCTCCCACCCCAATATGCGGGGCCGGGGCCGAGGCTGCCTTCTCCCGCGTTTTGTGAG
 CTCTTCTGCAGCACTTTGAAGCCGAGGTGGCCCGGCCCTCTGGCTCCCTGTCGCCACCCATCTGGCTC
 CCCTGAGCCCTGGTGGGAGATTTCGCCACATGACCTGTCCCTTGAGAGCTGCAGGGTGGTGGGCCCT
 GGCTGTGTGGGCCCTTCTCGATCATCTGAGGACCTGGCCGGCCCTCCCTTCTCAGTCTTCTCTCC
 TCTACAACCTCTCAAGCCGAAGCTCAAGAAGCGTTTTCCCTGCGTTCAGTGGTTCGCTGTCCGAG
 GCTCAGTCCGTGGCATCTGCAGTGGCGGGGACCGTTGACCCTCCCTCCGCTGGGCCCTGGAGAC
 CTGCTCAGGCCCCAGTCTTAGGTGAAACAGCAACTCCAACCTCTGGCGGGCTGGGACCGTTGGT
 AGGGGACTGGTCACTGATGGAACGTCCCTGGGAAAGATGGACTCACCGTTTTGAGAGGCTGAGACTCA
 GTCGGGGAGGGGCGCCTTGAAGGATGGAGCAGGGATGGTGCAGAGGGAAGAGCTGCTGAGTTTCATGGG
 GGCTGAGGAGGCAGCCCTGACCCAGCCGAGTGGGCCGGGGAGGAGGGTGGTGGGCCTCCTTACGGG
 GGAGGAGGGCAGCCCTCAGTGGCAGAAGTGTGCGCTGCTGCTTGAAGTGAAGGAGAAGGAGGAGGAA
 GTCGCCTGGAGTTCTTTGTACCACCAAGGCCCTCTCGGCCCGACTCAGCATCCCTGCTTCTATCAC
 AGAGTCCGACAACACAGCCCTGGAGATGCCTGACCGGGAGAACACGTTTGTGGTTAAGGTGGAAGGT
 CCATCCGAGTATATCATGGAGACAGTGGATGCCAGCATGTGAAGGCCTGGTGTCTGACATCCAAGAAT
 GCCTGAGCCCAGGACCCCTGCCCTGCTACCAGTCCCCGCCCATGACCCCTCCCTTGGCCCTGGACCTC
 ATTCTTACAAGGGAGAACACAGACAGCCTGGAGCTGTCCTGCCTGAATCACTCGGAGAGTCTACCAGC
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 AGGGTCAGTGCCGGTCCAGCACCTGTGTTCCAGTCCATTTTCGATATGCTCGAGCACTCCGGGTGCA
 CCCCATCCCTTTGGAGTGGGAGGCTCCAGTGTGTTGTCCTTGTGAGCTATGTCCCATCTCCCAGCGA
 CAGCAGGAACCGACCACCTCCCATGACCCACCCAGCCCTGAACCCCTTTCATGGACAGATCCCCAC
 AGCCTGGGGCAGAAGAGGCGTCGAGGGCGCCAGAAGTGGCGGCAGCAGCAGCCGAGCAGCCAAAGAGAG
 GCAAGAGAAAGAGAAAGCGGGCGGTGGAGGGTCCCGAAAGAGCTGGTCCCCGTGGTTGAGCTGGTCCC
 GTGGTTGAATTGGAAGAGGCCATAGCCCCAGGCTCAGAGGCCAGGGCGCTGGTCTGGTGGGACGCGG
 GGGTCCCCCAATGGTGCAGCTGCAGCAGTCAACTAGGGGGTGGTGGAGAGGAAGGGGCCACCCAG
 GGCCATTAACAACCAGTACTCCTTCGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG227881 representing NM_001145795
 Red=Cloning site Green=Tags(s)

MNGAPSPEDGASPSSPPLPPPPPPSWREFCESHARAAALDFARRFRLYLASHPQYAGPGAEAAFRRFAE
 LFLQHFEAEVARASGSLSPILAPLSPGAEISPHDLSESCRVGGPLAVLGPSRSSEDLAGPLPSSVSSS
 STTSSKPKLKKRFSLRVSVGRSVRGSVRGILQWRGTVDPPSSAGPLETSSGPPVLGGNSNSNSGGGAGTVG
 RGLVSDGTPSPGERWTHRFRERLRLSRGGGALKDAGMVQREELL SFMGAEAAAPDPAGVGRGGVAGPPSG
 GGGQPQWQKCRLLLRSEGE GGGSRLEFFVPPKASRPRLSIPCSSITDVRTTTALEMPDRENTFVVKVEG
 PSEYIMETVDAQHVKAWSVDIQECLSPGPCPATSPRPMTLPLAPGTSFLTRENTDSLELSCLNHSESLPS
 QDLLLGPSESNDRLSQGAYGGLSDRPSASISPSASIAASHFDSMELLPELPPRIPIIEGPPTGTVHPL
 SAPYPLDTPETATGSFLFQGEPEGGGDQPLSGYPWFHGMLSRLKAAQLVLTGGTGS HVFLVRQSETR
 RGEYVLT FNFGKAKHLRLSLNEEGQCRVQHLWFQSI FDMLEHFRVHPIPLESGGSSDVVLSYVPPSSQR
 QQEPTTSHDPPQPPEPPSWTDPQP GAEASRAPEVAAAAAAAAAKERQEKEKAGGGGVPEELVPVVELVP
 VVELEEAIAPGSEAQAGSGGDAGVPPMVQLQQSPLGGDGEEGGHPRAINNQYSFV

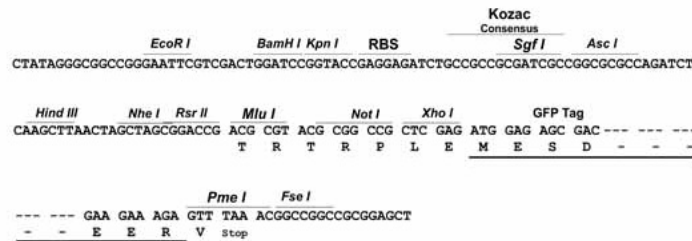
TRTRPLE - GFP Tag - V

Restriction Sites:

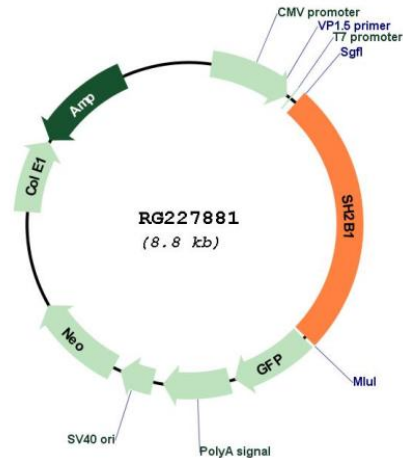
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001145795

ORF Size: 2268 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001145795.1</u> , <u>NP_001139267.1</u>
RefSeq Size:	2946 bp
RefSeq ORF:	2271 bp
Locus ID:	25970
UniProt ID:	<u>Q9NRF2</u>
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]