

## Product datasheet for **RG229333**

### SH2B2 (NM\_020979) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SH2B2 (NM_020979) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SH2B2
Synonyms:	APS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG229333 representing NM\_020979  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGATCCAAGCTATTGTCTGCCATGGCTTCCCATCTCAGGACCTCTCTGGCCGCTATCATCCCAGC  
AGTGGAGTTCAGCCCACTACTCTGAACCAAGCCGAGGTGGCTGCGATGGGACGGAAGCCATGAATGGTGC  
CGGCCCTGGCCCCGCGCAGCCGCCCGGTCCAGTCCCGGTCCCGGTCCCGGACTGGCGCAGTCTCTGC  
GAGCTGCATGCGCAGGCGGCCGCGTGGACTTTGCGCACAAGTTCTGCCGTTTCTGCGGGACAACCCAG  
CTTACGACACGCCGACGCCGCGCCTCCTTCTCCCGCACTTCGCCGCAACTTCTGGACGTCTTCGG  
CGAGGAGGTGCGCCGCTGCTGGTGGTGGGCCGACGACTCGGGGCGCGCCGTGAGCGCAGAGGCCATG  
GAGCCGGAGCTCGCGGACACCTCTGCACTCAAGGCGGCCCTACGGCCACTCGCGGAGCTCGGAGGACG  
TGTCCACGCACGCGGCCACCAAGGCCCGGTTTCGAAGGGCTTTCGCTGCGCAACATGAGCCTGTGCGT  
GGTGGACGGCGTGCAGCATGTGGCACGGCGCGCCTCGCCGAGCCGACGCGGCAGCTGCCCCGCGC  
ACCGCCGAGCCCGCACAAGTGGACGCGCGCCTGAGGCTGTGCGGAGCCTGGCTGCCAAGGTGGAGC  
TGGTGGACATTCAACGCGAGGGGGCGTGCCTTTCATGGTGGCCGACGACGCGGCCGCGGGCTCCGGGG  
CTCGGCTCAGTGGCAGAAGTGCCGCTGCTCTGCGCAGGGCTGTGGCCGAGGAACGCTTCCGCCTGGAG  
TTCTTCGTGCCGCCAAAGCCTCCAGGCCAAAGTTCAGCATCCCCTGTGAGCCATCATTGAGGTCCGCA  
CCACCATGCCCTTGAAATGCCAGAGAAGGATAACACATTCGTCCTCAAGGTAGAGAATGGAGCCGAATA  
CATCTTGAGACCATCGACTCTCTGCAGAAGCACTCGTGGTGTAGTGCATCCAGGGTGCCTGGACCCC  
GGTGACAGTGAGGAAGACACCGAGCTCTCTGTACCCGAGGAGGCTGTCTGGCCAGCCCGTGGCCTCCT  
GCAGCTGTGAGCTCCTGACTGATGCAGTCGACCTGCCCGCCCCCAGAGACGACAGCCTGGGTGCAGT  
GGTGACAGCCCCCACAGCCGAGGTCGAGATGCCGTGAGAGAATCCCTGATCCACGTCCCGCTAGAGACC  
TTTCTGCAGACCCTGGAATCCCCGGGCGCAGCGGCAAGTGCAGCAATAACACAGGGGAACAGGGTGCAG  
AGACGGATCCCGAGGCTGAACCCGAGCTGGAGCTATCCGACTACCCATGGTTCCACGGGACACTGTCCCG  
GGTCAAGGCTGCTCAACTGGTTCTGGCAGGGGGGCCCGAACCAGGCCCTTTCGTGATCCGCCAAAGT  
GAGACTCGGCTGGGGAGTACGTGCTGACCTTCAACTTCCAGGGCAAGGCCAAGCACCTGCGCCTGTCCC  
TGAACGGCCACGGCCAGTGTACGTACAGCATCTGTGGTTCAGTCTGTGCTTGCATGCTCCGCCACTT  
CCACACACACCCATCCCCTGGAGTCAAGGGGCTCGGCCGACATCACCTTCGAGCTATGTGCGGGCC  
CAGGACCCCCACAGAGCCGGGCCACGCCCTGCCGCGCCGCGTCCCGGCTGCTGGAGCGACT  
CGCCCGGCCAGCACTACTTCTCCAGCCTCGCCGCGGCCGCTGCCGCGCTGCCTCGCCCTCCGACGCGC  
CGGCGCCTCCTCGTCTTCCGCTCGTCTCTGCCGCTCGGGGCCGCCGCCCGCGCCCGTGCAG  
GGCCAGCTCAGCGCGCGGAGCCGAGCAACAGCGCCGAGCGCCTGCTGGAGGCCGTGGCCGCCACCGCC  
CCGAGGAGCCCCGAGGCCGCGCCCGGCCGCGCGCGCGTGGAGAACCAGTACTCTTCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence: >RG229333 representing NM\_020979  
 Red=Cloning site Green=Tags(s)

MDPSYCPAHGFPSQDPLWPLSSQQWSSAHYSEPAAGGCDGTEAMNGAGPGPAAAAAPVVPVVPDWRQFC  
 ELHAQAAAVDFAHKFCRFLRDNPAYDTPDAGASF SRHF AANFLDVFGEVRRVL VAGPTTRGAAVSAEAM  
 EPELADTSALKAAPYGHSRSEDVSTHAATKARVRKGFSLRNMSLCVVDGVRDMWHRASPEPDAAPR  
 TAEPRDKWTRRLRLSRTLAAKVELVDIQREGALRFMVADDAAGSGGSAQWQKCRLLLRRAVAEERFRLE  
 FFVPPKASRPKVSIPLSAIIIEVRTTMPLEMEKDNFTVLKVENGAEYILETIDSLQKHSWVADIQGCVDP  
 GDSEEDTELSCTRGGLASRVASCCELLTDAVDLPRPPETTAVGAVVTAPHSRGRDAVRESLIHVPLET  
 FLQTLSPGGSGSDSNNTGEQGAETDPEAEPELELSDYPWFHGTLSRVKAAQLVLAGGPRNHGLFVIRQS  
 ETRPGEYVLTNFGQKAKHLRLSLNGHQCHVQHLWFQSVLDMLRHFHTHPIPLESGGSADITLRSYVRA  
 QDPPPEPGPTPPAAPASPACWSDSPGQHYFSSLAAAACPPASPSDAAGASSSSASSSSAASGPAPPRPVE  
 GQLSARSRNSAERLLEAVAATAAEEPPEAAPGRARAVENQYSFY

TRTRPLE - GFP Tag - V

Restriction Sites:

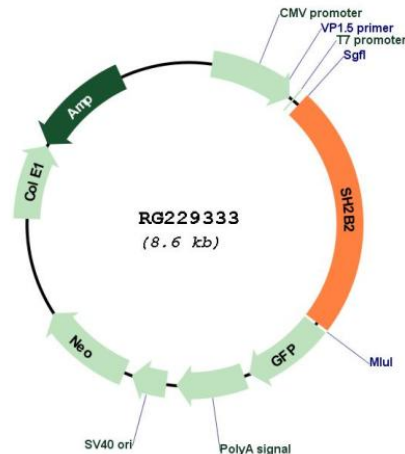
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_020979

ORF Size: 2025 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\\_020979.5](#)

RefSeq Size:	2157 bp
RefSeq ORF:	2028 bp
Locus ID:	10603
UniProt ID:	<u><a href="#">O14492</a></u>
Cytogenetics:	7q22.1
Domains:	SH2, PH
Protein Families:	Druggable Genome
Protein Pathways:	Insulin signaling pathway, Neurotrophin signaling pathway
Gene Summary:	The protein encoded by this gene is expressed in B lymphocytes and contains pleckstrin homology and src homology 2 (SH2) domains. In Burkitt's lymphoma cell lines, it is tyrosine-phosphorylated in response to B cell receptor stimulation. Because it binds Shc independent of stimulation and Grb2 after stimulation, it appears to play a role in signal transduction from the receptor to the Shc/Grb2 pathway. [provided by RefSeq, Jun 2009]