

Product datasheet for **RC229333**

SH2B2 (NM_020979) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SH2B2 (NM_020979) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SH2B2
Synonyms:	APS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC229333 representing NM_020979
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATCCAAGCTATTGTCTGCCATGGCTTCCCATCTCAGGACCCTCTCTGGCCGCTATCATCCCAGC
 AGTGGAGTTCAGCCCACTACTCTGAACCAAGCCGAGGTGGCTGCGATGGGACGGAAGCCATGAATGGTGC
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 CTTACGACACGCCGACGCCGCGCCTCCTTCTCCCGCACTTCGCCGCAACTTCTGGACGTCTTCGG
 CGAGGAGTGGCGCGTGTGGTGGTGGGCCGACGACTCGGGGCGCGCCGTGAGCGCAGAGGCCATG
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 CAGGACCCCCACAGAGCCGGGCCACGCCCTGCGCGCCCGCTCCCGGCTGCTGGAGCGACT
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 CCGAGGAGCCCCGAGGCCGCGCCCGCGCGCGCGCGCTGGAGAACCAGTACTCTTCTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229333 representing NM_020979
Red=Cloning site Green=Tags(s)

MDPSYCPAHGFPSQDPLWPLSSQQWSSAHYSEPAAGGCDGTEAMNGAGPGPAAAAAPVVPVVPVDPWRQFC
 ELHAQAAAADF AHKFCRFLRDNPAYDTPDAGASF SRHF AANFLDVFGEVRRVL VAGPTTRGA AVSAEAM
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 TAEPDRKWTRRLRLSRTLAAKVELVDIQREGALRFMVADDAAGSGGSAQWQKCRLLLRRAVAEERFRLE
 FFVPPKASRPKVSIPLSAIIIEVRTTMPLEMEKDNFTVLKVENGA EYILETIDSLQKHSWVADIQGCVDP
 GDSEEDTELSCTRGGCLASRVASCCELLTDAVDLPRPPETTAVGAVVTAPHSRGRDAVRESLIHVPLET
 FLQTLSPGGSGSDSNTGEQGAETDPEAEPELELSDYPWFHGTLSRVKAAQLVLAGGPRNHGLFVIRQS
 ETRPGEYVLTNFFQGKAKHLRLSLNGHQCHVQHLWFQSVLDMLRHFHTHP IPLESGGSADITLSYVRA
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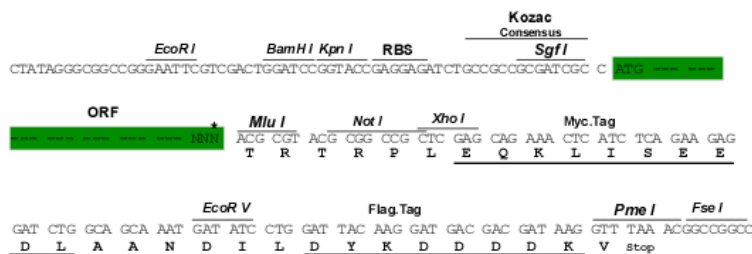
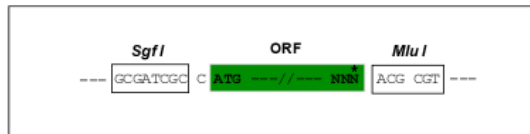
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8035_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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 ORF: 2028 bp

Locus ID: 10603

UniProt ID: [O14492](#)

Cytogenetics: 7q22.1

Domains: SH2, PH

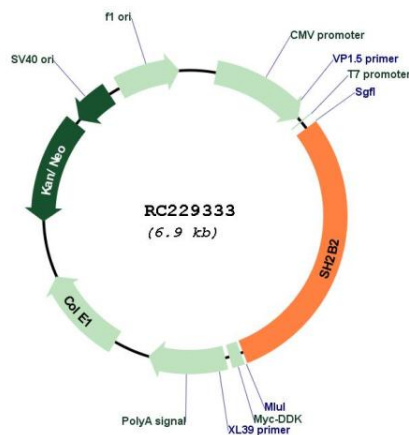
Protein Families: Druggable Genome

Protein Pathways: Insulin signaling pathway, Neurotrophin signaling pathway

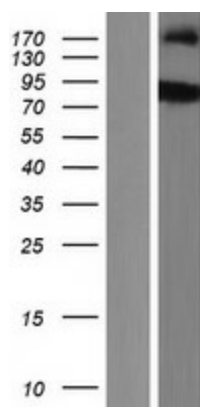
MW: 72.1 kDa

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]

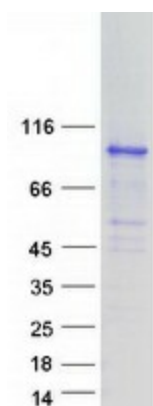
Product images:



Circular map for RC229333



Western blot validation of overexpression lysate (Cat# [LY432348]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229333 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SH2B2 protein (Cat# [TP329333]). The protein was produced from HEK293T cells transfected with SH2B2 cDNA clone (Cat# RC229333) using MegaTran 2.0 (Cat# [TT210002]).