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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)

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ORF Nucleotide Sequence:

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATCCAAGCTATTGTCCTGCCCATGGCTTCCCATCTCAGGACCCTCTCTGGCCGCTATCATCCCAGC
AGTGGAGTTCAGCCCACTACTCTGAACCAGCCGCAGGTGGCTGCGATGGGACGGAAGCCATGAATGGTGC
CGGCCCTGGCCCCGCCGCAGCCGCCCCGGTCCCAGTCCCGGTCCCGGTCCCGGACTGGCGGCAGTTCTGC
GAGCTGCATGCGCAGGCGGCCGCCGTGGACTTTGCGCACAAGTTCTGCCGTTTCCTGCGGGACAACCCAG
CTTACGACACGCCCGACGCCGGCGCCTCCTTCTCCCGCCACTTCGCCGCCAACTTCCTGGACGTCTTCGG
CGAGGAGGTGCGCCGCGTGCTGGTGGCTGGGCCGACGACTCGGGGCGCGGCCGTGAGCGCAGAGGCCATG
GAGCCGGAGCTCGCGGACACCTCTGCACTCAAGGCGGCGCCCTACGGCCACTCGCGGAGCTCGGAGGACG
TGTCCACGCACGCGGCCACCAAGGCCCGCGTTCGCAAGGGCTTCTCGCTGCGCAACATGAGCCTGTGCGT
GGTGGACGGCGTGCGCGACATGTGGCACCGGCGCGCCTCGCCCGAGCCCGACGCGGCAGCTGCCCCGCGC
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TGGTGGACATTCAACGCGAGGGGGCGCTGCGCTTCATGGTGGCCGACGACGCGGCCGCGGGCTCCGGGGG
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TTCTTCGTGCCGCCCAAAGCCTCCAGGCCCAAGGTCAGCATCCCACTGTCAGCCATCATTGAGGTCCGCA
CCACCATGCCCCTGGAAATGCCAGAGAAGGATAACACATTCGTCCTCAAGGTAGAGAATGGAGCCGAATA
CATCTTGGAGACCATCGACTCTCTGCAGAAGCACTCGTGGGTAGCTGACATCCAGGGCTGCGTGGACCCC
GGTGACAGTGAGGAAGACACCGAGCTCTCCTGTACCCGAGGAGGCTGTCTGGCCAGCCGCGTGGCCTCCT
GCAGCTGTGAGCTCCTGACTGATGCAGTCGACCTGCCCCGCCCCCCAGAGACGACAGCCGTGGGTGCAGT
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CGGCGCCTCCTCGTCTTCCGCCTCGTCGTCCTCTGCCGCGTCGGGGCCCGCCCCCCCGCGCCCCGTCGAG
GGCCAGCTCAGCGCGCGGAGCCGCAGCAACAGCGCCGAGCGCCTGCTGGAGGCCGTGGCCGCCACCGCCG
CCGAGGAGCCCCCGGAGGCCGCGCCCGGCCGCGCGCGCGCCGTGGAGAACCAGTACTCCTTCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

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

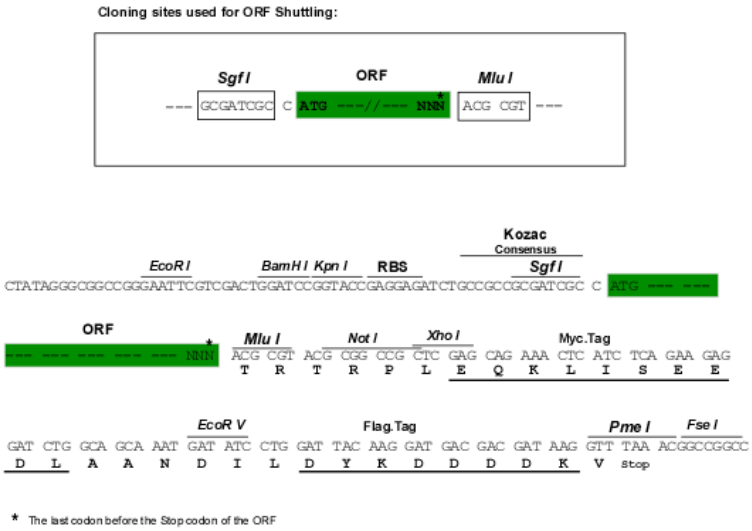
MDPSYCPAHGFPSQDPLWPLSSQQWSSAHYSEPAAGGCDGTEAMNGAGPGPAAAAPVPVPVPVPDWRQFC
ELHAQAAAVDFAHKFCRFLRDNPAYDTPDAGASFSRHFAANFLDVFGEEVRRVLVAGPTTRGAAVSAEAM
EPELADTSALKAAPYGHSRSSEDVSTHAATKARVRKGFSLRNMSLCVVDGVRDMWHRRASPEPDAAAAPR
TAEPRDKWTRRLRLSRTLAAKVELVDIQREGALRFMVADDAAAGSGGSAQWQKCRLLLRRAVAEERFRLE
FFVPPKASRPKVSIPLSAIIEVRTTMPLEMPEKDNTFVLKVENGAEYILETIDSLQKHSWVADIQGCVDP
GDSEEDTELSCTRGGCLASRVASCSCELLTDAVDLPRPPETTAVGAVVTAPHSRGRDAVRESLIHVPLET
FLQTLESPGGSGSDSNNTGEQGAETDPEAEPELELSDYPWFHGTLSRVKAAQLVLAGGPRNHGLFVIRQS
ETRPGEYVLTFNFQGKAKHLRLSLNGHGQCHVQHLWFQSVLDMLRHFHTHPIPLESGGSADITLRSYVRA
QDPPPEPGPTPPAAPASPACWSDSPGQHYFSSLAAAACPPASPSDAAGASSSSASSSSAASGPAPPRPVE
GQLSARSRSNSAERLLEAVAATAAEEPPEAAPGRARAVENQYSFY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

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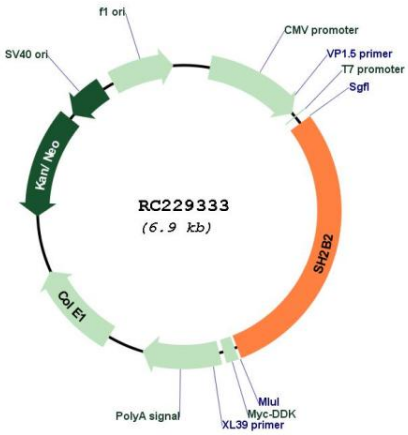
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
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

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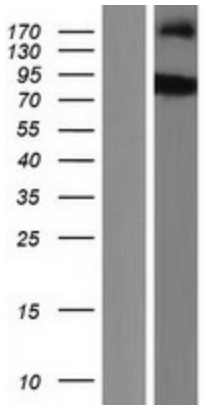
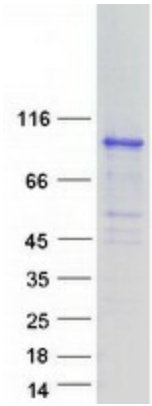


Western blot validation of overexpression lysate (Cat# [LY432348]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229333 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



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]).

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