

Product datasheet for **RC227881**

SH2B1 (NM_001145795) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SH2B1 (NM_001145795) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SH2B1
Synonyms:	PSM; SH2B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC227881 representing NM_001145795
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAATGGTGCCCTTCCCCAGAGGACGGGGCCTCCCCCTCGTCTCCCCCGCTGCCCCACCCCCGCCCC
 CTAGTTGGCGGGAGTTCTGTGAGTCCCACGCCCGGGCTGCGGCTCTGGACTTTGCCCGCCGTTTTCGCCT
 CTACCTGGCCTCCCACCCCAATATGCGGGGCCGGGGCCGAGGCTGCCTTCTCCCGCCGTTTTGTGAG
 CTCTTCTGCAGCACTTTGAAGCCGAGGTGGCCCGGGCCTCTGGCTCCCTGTCGCCACCCATCCTGGCTC
 CCCTGAGCCCTGGTGGGAGATTTGCCACATGACCTGTCCCTTGAGAGCTGCAGGTGGTGGGCCCT
 GGCTGTGTGGGCCCTTCTCGATCATCTGAGGACCTGGCCGGCCCCCTCCCTTCTCAGTCTTCTCTCC
 TCTACAACCTCTCAAGCCGAAGCTCAAGAAGCGTTTTCCCTGCGTTCAGTGGTTCGCTGTCCGAG
 GCTCAGTCCGTGGCATCCTGCAGTGGCGGGGACCGTTGACCCTCCCTCCGCTGGGCCCTGGAGAC
 CTGCTCAGGCCCCAGTCTTAGGTGAAACAGCAACTCCAACCTCTGGCGGGCTGGGACCGTTGGT
 AGGGGACTGGTCACTGATGGAACGTCCCCTGGGAAAGATGGACTCACCGTTTTGAGAGGCTGAGACTCA
 GTCGGGGAGGGGGCCCTTGAAGGATGGAGCAGGGATGGTGCAGAGGGAAGAGCTGCTGAGTTTCATGGG
 GGCTGAGGAGGCAGCCCCTGACCCAGCCGAGTGGGCCGGGGAGGAGGGGTGGTGGGCCTCCTTACGGG
 GGAGGAGGGCAGCCCTCAGTGGCAGAAGTGTGCGCTGCTGCTTGAAGTGAAGGAGAAGGAGGAGGAGAA
 GTCGCCTGGAGTTCTTTGTACCACCAAGGCCTCTCGGCCCGACTCAGCATCCCCTGCTTCTATCAC
 AGAGTCCGACAACACAGCCCTGGAGATGCCTGACCGGGAGAACACGTTTGTGGTTAAGGTGGAAGGT
 CCATCCGAGTATATCATGGAGACAGTGGATGCCAGCATGTGAAGGCCTGGTGTCTGACATCCAAGAAT
 GCCTGAGCCCAGGACCCCTGCCCTGCTACCAGTCCCCGCCCATGACCCCTCCCTTGGGCCCTGGACCTC
 ATTCTTTACAAGGGAGAACACAGACAGCCTGGAGCTGTCCTGCCTGAATCACTCGGAGAGTCTACCCAGC
 CAGGACCTGCTGCTTGGACCCAGCGAGCAATGACCGCCTGTCGAGGGGGCATATGGGGCCTCTCAG
 ACCGCCCTCGGCATCCATCTCCCCAGCTCTGCCTCCATTGCCGCTCCCATTTTACTCGATGGAAC
 GCTTCCCCCAGAGTTGCCCCCCGCATCCCCATTGAAGAGGGACCCCAACAGGGACAGTTCATCCCCTC
 TCAGCCCCCTACCCTCCCTTGGACACTCCGAAACAGCCACAGGGTCTTCTGTCCAGGGGGAGCCAG
 AGGGCGGTGAGGGGGACAGCCCCTCTCAGGGTATCCTTGGTTCCACGGGATGCTCTCTCGGCTCAAGGC
 TGCACAGTTGGTCTGACTGGCGGCACTGGCTCCACGGTGTCTTCTGGTGCGCCAGAGTGAACAAGG
 CGGGGTGAATACGTCCTCACCTTCAACTCCAGGGCAAGGCCAAGCACCTGCGTTTGTGCTGAACGAGG
 AGGGTCAGTGCCGGTCCAGCACCTGTGGTTCCAGTCCATTTTCGATATGCTCGAGCACTCCCGGTGCA
 CCCCATCCCTTTGGAGTGGGAGGCTCCAGTGTGTTGTCCTTGTGAGCTATGTCCCATCTCCCAGCGA
 CAGCAGGAACCGACCACCTCCCATGACCCACCCAGCCCCTGAACCCCTTTCATGGACAGATCCCCAC
 AGCCTGGGGCAGAAGAGGCGTCGAGGGCGCCAGAAGTGGCGGCAGCAGCAGCCGAGCAGCAAGAGAG
 GCAAGAGAAAGAGAAAGCGGGCGGTGGAGGGTCCCAGGAGAGCTGGTCCCCGTGGTTGAGCTGGTCCCC
 GTGGTTGAATTGGAAGAGGCCATAGCCCCAGGCTCAGAGGCCAGGGCGCTGGTCTGGTGGGACGCGG
 GGGTCCCCCAATGGTGCAGCTGCAGCAGTCAACTAGGGGGTGGTGGAGAGGAAGGGGGCCACCCAG
 GGCCATTAACAACCAGTACTCCTTCGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >RC227881 representing NM_001145795
 Red=Cloning site Green=Tags(s)

MNGAPSPEDGASPSSPPLPPPPPPSWREFCESHARAAALDFARRFRLYLASHPQYAGPGAEAAFRRFAE
 LFLQHFEEAVARASGSLSPILAPLSPGAEISPHDLSESCRVGGLAVLGPSSRSEDLAGPLPSSVSS
 STTSSKPKLKKRFSLRVSVGRSVRGSVRGILQWRGTVDPPSSAGPLETSSGPPVLGGNSNSNSGGGAGTVG
 RGLVSDGTSPGERWTHRFRERLRLSRGGALKDGAGMVQREELL SFMGAEEAAPDPAGVGRGGVAGPPSG
 GGGQPQWQKCRLLLRSEGEgggsrLEFFVPPKASRPRLSIPCSSITDVRTTTALEMPDRENTFVVKVEG
 PSEYIMETVDAQHVKAWSIDIQECLSPGPCPATSPRPMTLPLAPGTSFLTRENTDSLELSCLNHSESLPS
 QDLLLGPSESNDRLSQGAYGGLSDRPSASISPASSIAASHFDSMELLPELPPRIIEEGPPTGTVHPL
 SAPYPLDTPETATGSFLFQGEPEGGEDQPLSGYPWFHGMLSRLKAAQLVLTGGTGSHGVLVRQSETR
 RGEYVLTNFQGKAKHLRLSLNEEGQCRVQHLWFQSI FDMLEHFRVHPIPLESGGSSDVVLSYVPPSSQR
 QQEPTTSHDPPQPPEPPSWTDPQPGEAEASRAPEVAAAAAAKERQEKEKAGGGGVPEELVPVVELVP
 VVELEEAIAPGSEAQAGSGGDAGVPPMVQLQQSPLGGDGEEGGHPRAINNQYSFV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8037_c08.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



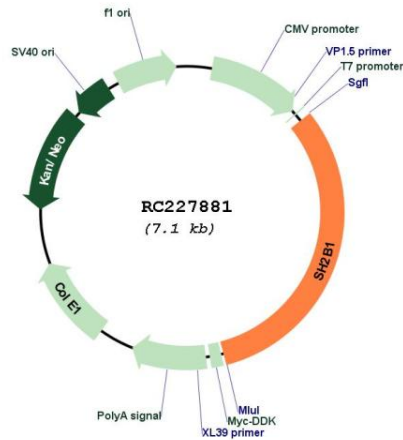
* The last codon before the Stop codon of the ORF

ACCN: NM_001145795

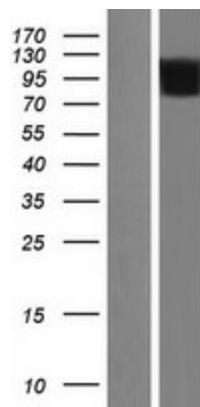
ORF Size: 2268 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	NM_001145795.1 , NP_001139267.1
RefSeq ORF:	2271 bp
Locus ID:	25970
UniProt ID:	Q9NRF2
Cytogenetics:	16p11.2
Protein Pathways:	Neurotrophin signaling pathway
MW:	79.2 kDa
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]

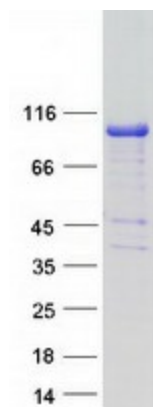
Product images:



Circular map for RC227881



Western blot validation of overexpression lysate (Cat# [LY429009]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227881 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SH2B1 protein (Cat# [TP327881]). The protein was produced from HEK293T cells transfected with SH2B1 cDNA clone (Cat# RC227881) using MegaTran 2.0 (Cat# [TT210002]).