

## Product datasheet for **RC225960**

### **SH3BP2 (NM\_001122681) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SH3BP2 (NM_001122681) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SH3BP2
Synonyms:	3BP-2; 3BP2; CRBM; CRPM; RES4-23
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC225960 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGCTGAAGAGATGCATTGGCCTGTCCCTATGAAGGCCATTGGTGCCAGAACCTGCTAACCATGC  
 CTGGGGCGTGGCCAAGGCTGGCTACCTGCACAAGAAGGGCGGTACCCAGCTGCAGCTGCTGAAATGGCC  
 CCTGCGCTTTGTATCATCCACAACGCTGCGTCTACTACTTCAAGAGTAGCACCTCTGCCTCCCCGCGAG  
 GGCGCCTTCTCCCTGAGTGGCTATAACCGGGTGTGCGGGCGGCTGAGGAGACCACGTCCAACAACGTTT  
 TCCCTTCAAGATCATCCACATCAGCAAGAAGCACCGCACGTGGTTCTTCTCGGCCTCTCCGAGGAGGA  
 GCGCAAGAGCTGGATGGCCTTGTGCGCAGGGAGATTGGCCACTCCACGAAAAGAAAGACTGCCCTTG  
 GACACCAGCGACTCCAGCTCGGACACAGACAGCTTCTACGGCGCAGTTGAGCGGCCTGTGGATATCAGCC  
 TTTCCCGTACCCACGGACAATGAAGACTATGAGCACGACGATGAGGATGACTCCTACCTGGAGCCTGA  
 CTCCCCGAGCCCGGAAGGCTTGAGGATGCCCTGATGCACCCACCGGCTTACCCACCACCCCGAGTGCC  
 ACGCCCAGGAAGCCAGCCTTCTCTGACATGCCCGGGGCCACTCCTTTACTCCAAGGGCCCCGGTCCCC  
 TACTGCCACCCCCGCCCTAAGCACGGCTCCAGATGTTGGCCTGGCTGCTGAGGACTCCAAGAGGGA  
 CCCACTGTGCCCGAGGCGGGCTGAGCCTTGCCCCAGGGTACCTGTACCCCCGAAGGATGAGCGATCCC  
 CCTCTGAGCACCATGCCACCGCACCGGCCTCCGAAACCCCTTGCTTCCGGGAGAGTGCCAGCCCCA  
 GCCCGGAGCCCTGGACCCTGGCCACGGGGCTGCTCCACTTCCAGTGTGCCATCATGGCCACTGCCAC  
 CTCCAGAACTGTGACAACTCAAGTCTTCCACTGTCCCCCGAGGACCACCCACATCTGAGCCCCCA  
 CCTGTGCCAGCCAACAAGCCCAAGTTCCTGAAGATAGCTGAAGAGGACCCCCAAGGGAGGCACCCATGC  
 CCGGACTCTTTGTGCCCCCGTGGCTCCCGGCCTCCTGCGCTGAAGCTGCCAGTGCCTGAGGCCATGGC  
 GCGGCCCGCAGTCTGCCAGGCCAGAGAAGCCGAGCTCCCGCACCTCCAGCGATCACCCCGCATGGG  
 CAGAGTTTCAGGAGCTTCTCCTTTGAAAAGCCCCGCAACCTCACAGGCTGACACTGGCGGGGACGACT  
 CGGACGAGGACTATGAGAAGGTGCCACTGCCAACTCGGTCTTGTCAACACCACGGAGTCTGCGAAGT  
 GGAAAGTTGTTCAAGGCTACAAGCCCCGGGAGAGCCCCAGGATGGACTCTACTGCATCCGAACTCC  
 TCTACCAAGTCCGGGAAGGTCTGGTTGTGTGGGACGAACTCTAACAAAGTGAAGAACTATCGCATT  
 TTGAGAAGGACTTAAGTTCTACCTGGAGGGCGAGGTCTGTTTGTGAGTGTGGCAGCATGGTGGAGCA  
 CTACCACACCCAGTGTGCCAGCCACCAGAGCTGTGCTGCGGCACCCCTACGGCTACTGGCCT  
 AGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC225960 protein sequence  
 Red=Cloning site Green=Tags(s)

MAAEMHWPVPMKAIGAQNLLTMPGVAKAGYLHKKGGTQLQLLKWPLRFVIIHKRCVYYFKSSTSASPQ  
 GAFSLSGYNRMRAAEETTSNNVFPFKIIHISKKHRTWFFSASSEERKSWMALLRREIGHFHEKKDLPL  
 DTSDDSSDTSFYGAVERPVDISLSPYPTDNEDYEHDDEDDSYLEPDSPEPGRLEDALMHPPAYPPPPVP  
 TPRKPAFSDMPRAHSFTSKGPGPLPPPPPKHGLPDVGLAAEDSKRDPLCPRRAEPCPRVPATPRRMSDP  
 PLSTMPTAPGLRPPCFRESASPSPEPWTPGHGACSTSSAAIMATATSRNCDKLSFHLSPRGPPTSEPP  
 PVPANKPKFLKIAEEDPPREAAMPGLFVPPVAPRPPALKLPVPEAMARPAVLPRPEKQPLPHLQRSPPDG  
 QSFRSFSFEKPRQPSQADTGGDDSDYEVKPLPNSVFNNTTESCEVERLFKATSPRGEPQDGLYCIKNS  
 STKSGKVLVWDETSNKVRNYRIFEKDSKFYLEGEVLFVSVGSMVEHYHVLPSHQSLLLRHPYGYTGP  
 R

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6139\\_e06.zip](https://cdn.origene.com/chromatograms/mk6139_e06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001122681

**ORF Size:** 1683 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\\_001122681.1](#), [NP\\_001116153.1](#)

**RefSeq Size:** 9068 bp

**RefSeq ORF:** 1686 bp

**Locus ID:** 6452

**UniProt ID:** [P78314](#)

**Cytogenetics:** 4p16.3

**Protein Families:** Druggable Genome

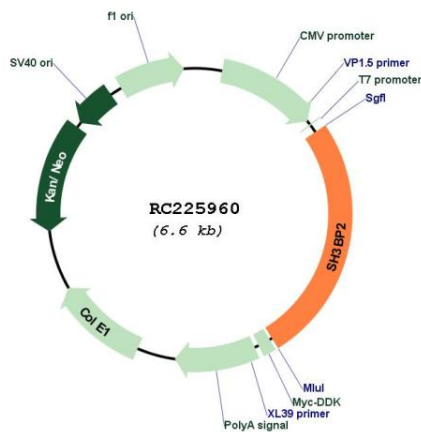
**Protein Pathways:** Natural killer cell mediated cytotoxicity

**MW:** 62.2 kDa

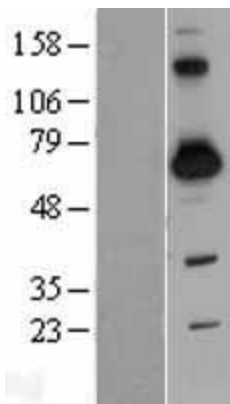
**Gene Summary:**

The protein encoded by this gene has an N-terminal pleckstrin homology (PH) domain, an SH3-binding proline-rich region, and a C-terminal SH2 domain. The protein binds to the SH3 domains of several proteins including the ABL1 and SYK protein tyrosine kinases, and functions as a cytoplasmic adaptor protein to positively regulate transcriptional activity in T, natural killer (NK), and basophilic cells. Mutations in this gene result in cherubism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

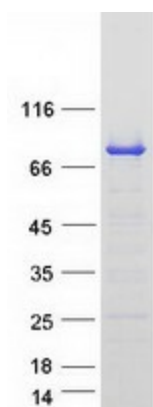
**Product images:**



Circular map for RC225960



Western blot validation of overexpression lysate (Cat# [LY426549]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225960 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SH3BP2 protein (Cat# [TP325960]). The protein was produced from HEK293T cells transfected with SH3BP2 cDNA clone (Cat# RC225960) using MegaTran 2.0 (Cat# [TT210002]).