

Product datasheet for SC309012

SPTBN1 (NM_003128) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPTBN1 (NM_003128) Human Untagged Clone
Tag:	Tag Free
Symbol:	SPTBN1
Synonyms:	betaSpII; ELF; HEL102; SPTB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC309012 representing NM_003128. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GTGAACCGTCAGAAATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTA
CCGAGGAGATCTGCCGCCGCGATCGCCGGCGCGCC
ATGACGACCACAGTAGCCACAGACTATGACAACATTGAGATCCAGCAGCAGTACAGTGATGTCAACAAC
CGCTGGGATGTCGACGACTGGGACAATGAGAACAGCTCTGCGCGGCTTTTGGAGCGGTCCCGCATCAAG
GCTCTGGCAGATGAGCGTGAAGCCGTGCAGAAGAAGACCTTCACCAAGTGGGTCAATTCCCACCTTGCC
CGTGTGCTCTGCCGGATCACAGACCTGTACACTGACCTTCGAGATGGACGGATGCTCATCAAGCTGCTG
GAGGTCTCTCTGGAGAGAGGCTGCCTAAACCCACCAAGGACGAATGCGCATCCACTGCTTAGAGAAT
GTGGACAAGGCCCTTCAGTTCCTGAAGGAGCAGAGAGTCCATCTTGAGAACATGGGGTCCCATGACATC
GTGGATGGAAACCACCGCTGACCCTTGGCCTCATCTGGACCATCATCCTGCGCTTCCAGATCCAGGAT
ATCAGTGTGAAAACCTGAAGACAACAAGAGAAGAAATCTGCCAAGGATGCATTGCTGTTGTGGTGCCAG
ATGAAGACAGCTGGGTACCCCAATGTCAACATTCACAATTTACCACTAGCTGGAGGGACGGCATGGCC
TTCAATGCACTGATACACAAACCCGGCCTGACCTGATAGATTTTGACAACTAAAGAAATCAACGCA
CACTACAACCTGCAGAATGCATTTAATCTGGCAGAACAGCACCTCGGCCCTACTAACTGTTGGACCCC
GAAGACATCAGCGTGGACCATCCTGATGAGAAGTCCATAATCACTTATGTGGTGACTTATTACCACTAC
TTCTCTAAGATGAAGGCCTTAGCTGTTGAAGGAAAACGAATTGAAAGGTGCTTGACAATGCTATTGAA
ACAGAAAAATGATTGAAAAGTATGAATCACTTGCCTCTGACCTTCTGGAATGGATTGAACAAACCATC
ATCATTCTGAACAATCGCAAATTTGCCAATTCCTGCTGGGTTCAACAGCAGCTTCAGGCATTC AAC
ACTTACCGCACTGTGGAGAAACCACCAATTTACTGAGAAGGGGAACTTGAAGTGCTGCTCTTACC
ATTGAGCAAGATGAGGGCCAACAACAGAGGCTACATGCCCGGGAGGGGAAGCTCATCTCTGAC
ATCAACAAGGCCTGGGAAAGACTGGAAAAGCGGAACACGAAAGAGAAGCTGGCTTTGCGGAATGAGCTC
ATAAGACAGGAGAACTGGAACAGCTCGCCCGCAGATTTGATCGCAAGGCAGCTATGAGGGAGACTTGG
CTGAGCGAAAACAGCGTCTGGTGTCTCAGGACAACCTTTGGGTTTACCTTCTGCAGTTGAGGCCGCC
ACAAAAAAGCACGAGGCCATTGAGACAGACATTGCCGCATACGAGGAGCGTGTGCAGGCTGTGGTAGCC
GTGGCCAGGGAGCTCGAGGCCGAGAATTACCACGACATCAAGCGCATCACAGCGAGAAGGACAATGTC
```



[View online »](#)

ATCCGGCTCTGGGAATACCTACTGGAAGTCTCAGGGCCCGGAGACAGCGGCTCGAGATGAACCTGGGG
CTGCAGAAGATATTCCAGGAAATGCTCTACATTATGGACTGGATGGATGAAATGAAGGTGCTAGTATTG
TCTCAAGACTATGGCAAACACTTACTTGGTGTGGAAGACCTGTTACAGAAGCACACCCTGGTTGAAGCA
GACATTGGCATCCAGGCAGAGCGGGTGAGAGGTGTCAATGCCCTCCGCCAGAAAGTTCCGAACAGACGGG
GAAGGTTACAAGCCCTGTGACCCCCAGGTGATCCGAGACCGCGTGGCCACATGGAGTTCTGTTATCAA
GAGCTTTGCCAGCTGGCGGCTGAGCGCAGGGCCCGTCTGGAAGAGTCCCGCCCTCTGGAAGTTCTTC
TGGGATGGCAGAAGAGGAAGGCTGGATACGGGAGAAGGAGAAGATCCTGTCTCGGACGATTACGGG
AAAGACCTGACCAGCGTCATGCGCTGCTCAGCAAGCACCGGGCGTTTCGAGGACGAGATGAGCGGCCG
AGTGGCCACTTTGAGCAGGCCATCAAGGAAGGCGAAGACATGATCGCGGAGGAGCACTTCGGGTCCGGAG
AAGATCCGTGAGAGGATCATTTACATCCGGGAGCAGTGGGCCAACCTAGAGCAGCTCTCGGCCATTCGG
AAGAAGCGCTGGAGGAGCCTCCCTGCTGCACCAGTTCCAGGCAGATGCTGATGACATTGATGCCTGG
ATGCTGGACATCCTCAAGATTGTCTCCAGCAGCGACGTGGGCCACGATGAGTATTCACACAGTCTCTG
GTCAAGAAACACAAGGACGTGGCGGAAGAGATCGCCAATTACAGGCCACCCTTGACACGCTGCACGAA
CAAGCCAGCGCCCTCCCCAGGAGCATGCCGAGTCTCCAGACGTGAGGGCAGGCTGTGGGCATCGAG
GAGCGGTATAAGGAGGTGGCAGAGCTGACGCGGCTGCGGAAGCAGGCACTCCAGGACACTCTGGCCCTG
TACAAGATGTTACAGCGAGGCTGATGCCTGTGAGCTCTGGATCGACGAGAAGGAGCAGTGGCTCAACAA
ATGCAGATCCCAGAGAAGCTGGAGGATCTGGAGGTTCATCCAGCACAGATTTGAGAGCCTAGAACCAGAA
ATGAACAACCAGGCTTCCCGGTTGCAGTGGTGAACCAGATTGCACGCCAGCTGATGCACAGCGGCCAC
CCAAGTGAGAAGGAAATCAAAGCCCAGCAGGACAACTCAACACAAGGTGGAGCCAGTTCAGAGAAGCTG
GTTGACAGGAAGAAGGATGCCCTCCTGTCTGCCCTGAGCATCCAGAACTACCACCTCGAGTGCAATGAA
ACCAAACTCTGGATTTCGGGAAAAGACCAAGGTTCATCGAGTCCACCAGGACCTGGGCAATGACCTGGCT
GGCGTATGGCCCTGCAGCGCAAGCTGACCGCATGGAGCGGGACTTGGTGGCCATTGAGGCAAAGCTG
AGTGACCTGCAGAAGGAGCGGAGAAGCTGGAGTCCGAGCACCCGACCAGGCCACGATCCTGTCT
CGGCTGGCCGAGATCAGCGACGTGTGGGAGGAGATGAAGACCACCCTGAAAAACCGAGAGGCCCTCCCTG
GGAGAGGCCAGCAAGCTGCAGCAGTTCTACGGGACTTGGACGACTTCCAGTCTGGCTCTCTAGGACC
CAGACAGCGATCGCTCGGAGGACATGCCAAACACCCTGACCGAGGCTGAGAAGCTGCTCACGCAGCAC
GAGAACATCAAGAACGAGATCGACAACACGAGGAGGACTACCAGAAGATGAGGGACATGGGCGAGATG
GTCACCCAGGGGCAGACCGATGCCCAGTACATGTTTCTGCGGCAGCGGCTGCAGGCCCTGGACACTGGA
TGGAACGAGCTCCACAAGATGTGGGAGAACAGACAAAACTCCTATCCCAGTACATGCCTACCAGCAG
TTCCTCAGAGACCGAAGCAAGCCGAAGCCTTTCTTAACAACCAGGAGTATGTTCTGGCTCACACTGAA
ATGCCTACCACCTTGAAGGAGCTGAAGCAGCAATTAAGCAAGAGGACTTCATGACCACCATGGAC
GCCAATGAGGAGAAGATCAATGCTGTGGTGGAGACTGGCCGGAGGCTGGTGGAGCATGGGAACATCAAC
TCAGATCGCATCCAGGAGAAGGTGGACTCTATTGATGACAGACATAGGAAGAATCGTGAGACAGCCAGT
GAACCTTTGATGAGGTTGAAGGACAACAGGGATCTACAGAAATCCTGCAAGATTGTCAAGAGCTGTCT
CTCTGGATCAATGAGAAGATGCTCACAGCCCAGGACATGTCTTACGATGAAGCCAGAAATCTGCACAGT
AAATGGTTGAAGCATCAAGCATTATGGCAGAACTTGCATCCAACAAGAATGGCTTGACAAAATCGAG
AAGGAAGGAATGCAGTCAATTCAGAAAAGCCTGAGACGGAAGCTGTGGTGAAGGAGAAACTCACTGGT
TTACATAAAATGTGGGAAGTCTTGAATCCACTACCCAGACAAAGGCCAGCGGCTCTTTGATGCAAA
AAGGCCGAACCTTTACCCAGAGCTGTGCAGATCTAGACAAATGGCTGCACGGCCTGGAGAGTCAAGT
CAGTCTGATGACTATGGCAAAGACCTGACCAGTGTCAATATCCTGCTGAAAAAGCAACAGATGCTGGAG
AATCAGATGGAAGTGGGAAAGAGGAGATCGAAGAGCTCCAAAGCCAAGCCAGGCCCTGAGTCAGGAA
GGGAAGAGCACCGACGAGGTAGACAGCAAGCGCCTCACCGTGCAGACCAAGTTTATGGAGTTGCTGGAG
CCCTTGAACGAGAGGAAGCATAACCTGCTGGCCTCCAAAGAGATCCATCAGTTCAACAGGGATGTGGAG
GACGAGATCTTGTGGTTGGAGAGAGGATGCCTTTGGCAACTTCCACGGATCATGGCCACAACCTCCAG
ACTGTGCAGTGTAAATAAAGAAAAATCAGACCCTCCAGAAAGAAATCCAGGGGCACCAGCCTCGCATT
GACGACATCTTTGAGAGGAGCCAAAACATCGTCACTGACAGCAGCAGCCTCAGCGCTGAGGCCATCAGA
CAGAGGCTTGCCGACCTGAAGCAGCTGTGGGGTCTCCTATTGAGGAGACAGAGAAACGCCACAGCGG
CTGGAGGAGGCGCACAGGGCCAGCAGTACTACTTTGACGCTGCTGAGGCCGAAGCCTGGATGAGCGAG
CAGGAGCTGTACATGATGTCAGAGGAGAAGGCCAAGGATGAGCAGAGTGTCTCCATGTTGAAGAAG
CACCAGATCTTAGAACAAGCTGTGGAGGACTATGCAGAGACCGTGCATCAGCTCTCCAAGACCAGCCGG
GCCCTGGTGGCCGACAGCCATCTGAAAGTGAAGCGATTAGCATGCGGCAGTCCAAGTGGATAAAGT
TACGCTGGTCTGAAAGACCTTGTGAAGAGAGAAGAGGCAAGCTGGATGAGAGACACAGGTTATTCCAG

CTCAACCGGGAGGTGGACGACCTGGAGCAGTGGATCGCTGAGAGGGAGGTGGTCGCAGGGTCCCATGAA
 CTGGGACAGGACTATGAGCATGTCACGATGTTACAAGAACGATCCGGGAGTTTGCCCGAGACACCGGG
 AACATTGGGCAGGAGCGCGTGGACACGGTCAATCACCTGGCAGATGAGCTCATCAACTCTGGACATTCA
 GATGCCGCCACCATCGCTGAATGGAAGGATGGCCTCAATGAAGCCTGGGCCGACCTCCTGGAGCTCATT
 GACACAAGAACACAGATTCTTGCCGCTTCTATGAACTGCACAAGTTTACCACGATGCCAAGGAGATC
 TTTGGCGGTATACAGGACAAACACAAGAACTCCCTGAGGAGCTTGGGAGAGATCAGAACACAGTGGAG
 ACCTTACAGAGAATGCACACTACATTTGAGCATGACATCCAGGCTCTGGGCACACAGGTGAGGCAGCTG
 CAGGAGGATGCAGCCCGCTCCAGGCGGCTATGCGGGTGACAAGGCCGACGATATCCAGAAGCGCGAG
 AACGAGGTCTGGAAGCCTGGAAGTCCCTCCTGGACGCCTGTGAGAGCCGAGGGTGCGGCTGGTGGAC
 ACAGGGGACAAGTTCCGCTTCTTCAGCATGGTGCACGACCTCATGCTCTGGATGGAGGATGTCATCCGG
 CAGATCGAGGCCAGGAGAAGCCAAGGGATGTATCATCTGTTGAACTCTTAATGAATAATCATCAAGGC
 ATCAAAGCTGAAATTGATGCACGTAATGACAGTTTCAACCTGCATTGAACTTGGGAAATCCCTGTTG
 GCGAGAAAACACTATGCATCTGAGGAGATCAAGGAAAAATTAAGTGCAGTTGACGGAAAAGAGGAAAGAA
 ATGATCGACAAGTGGGAAGACCGATGGGAATGGTTAAGACTGATTCTGGAGGTCCATCAGTTCTCAAGA
 GACGCCAGTGTGGCCGAGGCCTGGCTGCTTGGACAGGAGCCGTACCTATCCAGCCGAGAGATAGGCCAG
 AGCGTGGACGAGGTGGAGAAGCTCATCAAGCGCCACGAGGCATTTGAAAAGTCTGCAGCAACCTGGGAT
 GAGAGTTCTCTGCCCTGAAAAGCTGACTACATTGGAGTTACTGGAAGTGCAGCAGACAGCAAGAGGAA
 GAGGAGAGGAAGAGGCGCCGCTTCTCCCGAGCCGAGCAGCAAGGTTTTCAGAGGAAGCCGAGTCCAG
 CAGCAGTGGGATACTTCAAAGGAGAACAAGTTTCCCAAACGGTTTGCCAGCTGAACAGGGATCTCCA
 CGGATGGCAGAAACGGTGGACACAAGCGAAATGGTCAACGGCGCTACAGAACAAGGACGAGCTCTAAA
 GAGTCCAGCCCCATCCCCCCCCGACCTCTGATCGTAAAGCCAAGACTGCCCTCCAGCCAGAGTGCC
 GCCACCTTACCAGCCAGAACCAGGAGACACCTTCGGCCAGATGGAAGGCTTCCCTCAATCGGAAACAC
 GAGTGGGAGGCCACAATAAGAAAGCCTCAAGCAGGTCTGGCACAATGTTTATTGTGTCATAAAATAAC
 CAAGAAATGGGTTTCTACAAAGATGCAAAGACTGCTGCTTCTGGAATCCCTACCACAGCGAGGTCCCT
 GTGAGTTTGAAGAAGCTGTCTGCGAAGTGGCCCTTGATTACAAAAGAAGAAACACGATTCAAGCTA
 AGACTAAATGATGGCAATGAGTACCTCTTCCAAGCCAAAGACGATGAGGAAATGAACACATGGATCCAG
 GCTATCTCTTCCGCCATCTCTCTGATAAACACGAGGTGTCTGCCAGCACCCAGAGCAGCCAGCATCC
 AGCCGCGCGCAGACCCTCCCCACCAGCGTGTACCATCACCAGCGAGTCCAGTCCCGGCAAGCGGGAA
 AAGGACAAAGAGAAGACAAAGAGAAGCGGTTTCAGCCTTTTTGGCAAAAAGAAA TGA
 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC

- Restriction Sites:** Ascl-MluI
- Plasmid Map:** □
- ACCN:** NM_003128
- Insert Size:** 7095 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_003128.2](#)

RefSeq Size: 10238 bp

RefSeq ORF: 7095 bp

Locus ID: 6711

UniProt ID: [Q01082](#)

Cytogenetics: 2p16.2

Domains: CH, PH, spectrin

MW: 274.6 kDa

Gene Summary: Spectrin is an actin crosslinking and molecular scaffold protein that links the plasma membrane to the actin cytoskeleton, and functions in the determination of cell shape, arrangement of transmembrane proteins, and organization of organelles. It is composed of two antiparallel dimers of alpha- and beta- subunits. This gene is one member of a family of beta-spectrin genes. The encoded protein contains an N-terminal actin-binding domain, and 17 spectrin repeats which are involved in dimer formation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (1), also known as long or sigma-1, represents the longer transcript and encodes the longer isoform (1).