

Product datasheet for **SC300052**

beta 1 Spectrin (SPTB) (NM_000347) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | beta 1 Spectrin (SPTB) (NM_000347) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | SPTB |
| Synonyms: | EL3; HS2; HSPTB1; SPH2 |
| Vector: | <u>pCMV6 series</u> |
| Fully Sequenced ORF: | >NCBI ORF sequence for NM_000347, the custom clone sequence may differ by one or more nucleotides |

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CGTTTGTCTAGTTCTGGGAGTCACTGCAGCCAGAGCCCTCTACCCCTACTAG

- Restriction Sites:** Please inquire
- ACCN:** NM_000347
- 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_000347.4](#), [NP_000338.3](#)

RefSeq Size: 6695 bp

RefSeq ORF: 6414 bp

Locus ID: 6710

UniProt ID: [P11277](#)

Cytogenetics: 14q23.3

Protein Families: Druggable Genome

Gene Summary: This locus encodes a member of the spectrin gene family. Spectrin proteins, along with ankyrin, play a role in cell membrane organization and stability. The protein encoded by this locus functions in stability of erythrocyte membranes, and mutations in this gene have been associated with spherocytosis type 2, hereditary elliptocytosis, and neonatal hemolytic anemia. Alternatively spliced transcript variants have been described. [provided by RefSeq, Nov 2009]

Transcript Variant: This variant (2) differs in the 3' UTR and 3' coding region compared to variant 1. The resulting isoform (b) is shorter and has a distinct C-terminus compared to isoform a. This variant is also referred to as muscle beta spectrin.