

Product datasheet for **SC122565**

SFTPB (NM_000542) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SFTPB (NM_000542) Human Untagged Clone
Tag:	Tag Free
Symbol:	SFTPB
Synonyms:	PSP-B; SFTB3; SFTP3; SMDP1; SP-B
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_000542 edited
GCCATGGCTGAGTCACACCTGCTGCAGTGGCTGCTGCTGCTGCTGCCACGCTCTGTGGC
CCAGGCACTGCTGCCTGGACCACCTCATCCTTGGCCTGTGCCAGGGCCCTGAGTTCTGG
TGCCAAAGCCTGGAGCAAGCATTGCAGTGCAGAGCCCTAGGGCATTGCCTACAGGAAGTC
TGGGGACATGTGGGAGCCGATGACCTATGCCAAGAGTGTGAGGACATCGTCCACATCCTT
AACAAAGATGGCCAAGGAGGCCATTTTCCAGGACACGATGAGGAAGTTCTGGAGCAGGAG
TGCAACGTCCTCCCTTGAAGCTGCTCATGCCCCAGTGCACCAAGTGCTTGACGACTAC
TTCCCCCTGGTCAATCGACTACTTCCAGAACCAGACTGACTCAAACGGCATCTGTATGCAC
CTGGGCTGTGCAAATCCCGGCAGCCAGAGCCAGAGCAGGAGCCAGGGATGTCAGACCCC
CTGCCAAACCTCTGCGGGACCCTCTGCCAGACCCTCTGCTGGACAAGCTCGTCTCCCT
GTGCTGCCCGGGCCCTCCAGGCGAGGCCTGGGCTCACACACAGGATCTCTCCGAGCAG
CAATTCCTCCTCCTCCTCCTATTGCTGGCTCTGCAGGGCTCTGATCAAGCGGATCCAA
GCCATGATCCCAAGGTGCGCTAGCTGTGGCAGTGGCCAGGTGTGCCGCTGGTACCT
CTGGTGGCGGGCGCATCTGCCAGTGCCTGGCTGAGCGCTACTCCGTATCCTGCTGCAC
ACGCTGCTGGGCGCATGCTGCCAGTGGTCTGCCGCTCGTCTCCGGTGTCCATG
GATGACAGCGCTGGCCAAAGTCCGCCAGAGGAGAATGGCTGCCGCGAGACTCTGAGTGC
CACCTCTGCATGTCCGTGACCACCCAGGCCGGGAACAGCAGCAGCAGGCCATACCACAG
GCAATGCTCCAGGCTGTGTTGGCTCCTGGCTGGACAGGGAAAAGTGCAAGCAATTTGTG
GAGCAGCACACGCCCCAGCTGCTGACCCTGGTCCAGGGGCTGGGATGCCACACCACC
TGCCAGGCCCTCGGGGTGTGTTGGGACCATGTCCAGCCCTCTCCAGTGTATCCACAGCCCC
GACCTTTGATGAGAACTCAGCTGTCCAGCTGCAAAGGAAAAGCCAAGTGAAGACGGGCTCT
GGGACCATGGTGACCAGGCTCTTCCCCTGCTCCCTGGCCCTCGCCAGCTGCCAGGCTGAA
AAGAAGCCTCAGTCCCACACCCGCCCTCCTCACCGCCCTTCTCGGCAGTCACTTCCACT
GGTGGACCACGGGCCCCAGCCCTGTGTCGGCCTTGTCTGTCTCAGCTCAACCACAGTCT
GACACCAGAGCCCACTTCCATCCTCTCTGGTGTGAGGCACAGCAGGGCAGCATCTGGAG
GAGCTCTGCAGCCTCCACACCTACCACGACCTCCAGGGCTGGGCTCAGGAAAAACCAGC
CACTGCTTTACAGGACAGGGGTTGAAGCTGAGCCCCGCCTCACACCCACCCCATGCAC
TCAAAGATTGGATTTTACAGCTACTTGCAATTCAAAATTCAGAAGAATAAAAAATGGGAA
CATACAGAACTCTAAAAGATAGACATCAGAAATGTTAAGTTAAGCTTTTTCAAAAAATC
AGCAATTCACAGCGTAGTCAAGGGTGGACTGCACGCTCTGGCATGATGGGATGGCGA
CCGGGCAAGCTTTCTTCTCGAGATGCTCTGCTGCTTGAGAGCTATTGCTTTGTTAAGAT
ATAAAAAGGGGTTTCTTTTTGTCTTTCTGTAAGGTGGACTTCCAGCTTTTGATTGAAAGT
CCTAGGGTGATTCTATTTCTGCTGTGATTATCTGCTGAAAGCTCAGCTGGGGTTGTGCA
AGCTAGGGACCCATTCTGTGTAATACAATGTCTGCACCAATGCTAATAAAGTCCTATTC
TCTTTTATGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_000542 unedited GCGCTCAGATTTTGAATACGACTTCACTATAGGGCGGCCGCGATTCCCAGGATGCCATG GCTGAGTACACCTGCTGCAGTGGCTGCTGCTGCTGCTGCCACGCTCTGTGGCCAGGCA CTGCTGCCTGGACCACCTCATCCTTGGCCTGTGCCAGGGCCCTGAGTTCTGGTGCCAAA GCCTGGAGCAAGCATTGCAGTGCAGAGCCCTAGGGCATTGCCTACAGGAAGTCTGGGGAC ATGTGGGAGCCGATGACCTATGCCAAGAGTGTGAGGACATCGTCCACATCCTTAACAAGA TGGCCAAGGAGGCCATTTCCAGGACACGATGAGGAAGTTCCTGGAGCAGGAGTGCAACG TCCTCCCCTTGAAGCTGCTCATGCCCCAGTGCAACCAAGTGCTTGACGACTACTTCCCCC TGGTCATCGACTACTTCCAGAACCAGACTGACTCAAACGGCATCTGTATGCACCTGGGCC TGTGCAAATCCCAGGACCCAGAGCCAGAGCAGGAGCCAGGGATGTGAGACCCCTGCCCA AACCTCTGCGGGACCCTCTGCCAGACCCTCTGCTGGACAAGCTCGTCTCCCTGTGCTGC CCGGGGCCCTCCAGGCGAGGCCTGGGCCTCACACACAGGATCTCTCCGAGCAGCAATTCC CCATTCTCTCCCTATTGCTGGCTCTGCAGGGCTCTGATCAAGCGGATCAAGCCATGA TTCCAAAGGTGCGCTAGCTGTGGCAGTGGCCANGTGTGCCGCTGGTACCTCTGGTGG CGGGCGGCATCTGCCAGTGCCTGGCTGAGCGCTACTCCGTCATCTGCTCGACACGCTGC TGGGCCGATGCTGCCCCAGCTGGTCTGCCGCCTCGTCTCCGGGTGCTCATGGATGACA GCGC
Restriction Sites:	Please inquire
ACCN:	NM_000542
Insert Size:	2026 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).
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_000542.2 , NP_000533.2
RefSeq Size:	2026 bp
RefSeq ORF:	1146 bp
Locus ID:	6439
UniProt ID:	P07988
Cytogenetics:	2p11.2
Protein Families:	Druggable Genome, Secreted Protein

Gene Summary:

This gene encodes the pulmonary-associated surfactant protein B (SPB), an amphipathic surfactant protein essential for lung function and homeostasis after birth. Pulmonary surfactant is a surface-active lipoprotein complex composed of 90% lipids and 10% proteins which include plasma proteins and apolipoproteins SPA, SPB, SPC and SPD. The surfactant is secreted by the alveolar cells of the lung and maintains the stability of pulmonary tissue by reducing the surface tension of fluids that coat the lung. The SPB enhances the rate of spreading and increases the stability of surfactant monolayers in vitro. Multiple mutations in this gene have been identified, which cause pulmonary surfactant metabolism dysfunction type 1, also called pulmonary alveolar proteinosis due to surfactant protein B deficiency, and are associated with fatal respiratory distress in the neonatal period. Alternatively spliced transcript variants encoding the same protein have been identified.[provided by RefSeq, Feb 2010]

Transcript Variant: This variant (1) is the longer transcript. Both variants 1 and 2 encode the same protein.