

## Product datasheet for **SC118752**

### Integrin beta 8 (ITGB8) (NM\_002214) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin beta 8 (ITGB8) (NM_002214) Human Untagged Clone
Tag:	Tag Free
Symbol:	Integrin beta 8
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_002214, the custom clone sequence may differ by one or more nucleotides

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ATGTGCGGCTCGGCCCTGGCTTTTTTTACCGCTGCATTTGTCTGCCTGCAAAACGACCGGCGAGGTCCCG
CCTCGTTCCTCTGGGCAGCCTGGGTGTTTTCACTTGTTCTTGGACTGGCCAAGGTGAAGACAATAGATG
TGCATCTTCAAATGCAGCATCCTGTGCCAGGTGCCTTGCCTGGGTCCAGAATGTGGATGGTGTGTCAA
GAGGATTTCAATTCAGGTGGATCAAGAAGTGAAGTTGTGATATTGTTTCCAATTTAATAAGCAAAGGCT
GCTCAGTTGATTCAATAGAAATACCCATCTGTGCATGTTATAATACCCACTGAAAAATGAAATTAATACCCA
GGTGACACCAGGAGAAGTGTCTATCCAGCTGCGTCCAGGAGCCGAAGCTAATTTTATGCTGAAAGTTCAT
CCTCTGAAGAAATATCCTGTGGATCTTTATTATCTTGTGATGTCTCAGCATCAATGCACAATAATATAG
AAAAATTAATATCCGTTGAAACGATTTATCTAGAAAAATGGCATTTTTTCTCCCGTACTTTTCGTTGG
ATTTGGCTCATACGTTGATAAAACAGTTTACCATACATTAGCATCCACCCCGAAAGGATTCATAATCAA
TGCAGTGACTACAATTTAGACTGCATGCCTCCCATGGATACATCCATGTGCTGTCTTTGACAGAGAACA
TCACTGAGTTTGAGAAAGCAGTTTCATAGACAGAAGATCTCTGAAACATAGATACACCAGAAGGAGTTTT
TGACGCCATGCTTCAGGCAGCTGTCTGTGAAAGTCATATCGGATGGCGAAAAGAGGCTAAAAGATTGCTG
CTGGTGATGACAGATCAGACGTCTCATCTCGCTCTTGATAGCAAATTGGCAGGCATAGTGGTGCCCAATG
ACGGAACTGTCTCTGAAAAACAACGTCTATGCAAAATCGACAACCATGGAACACCCCTCACTAGGCCA
ACTTTTCAGAGAAATTAATAGACAACAACATTAATGTCACTTTGCAGTTCAAGGAAAAACAATTTTCATTGG
TATAAGGATCTTCTACCCCTCTTGCCAGGCACCATTTGCTGGTGAATAGAATCAAAGGCTGCAAACCTCA
ATAATTTGGTAGTGAAGCCTATCAGAAGCTCATTTTCAAGTGAAGTTCAATGAAAAATGTGATGTCACAGGAG
AACGTGACGAGCAATGATGAAGTTCTTTTCAATGTAACAGTTACAATGAAAAATGTGATGTCACAGGAG
GAAAAAACTATGCAATAATCAAACCTATTGGTTTTAATGAAACCGCTAAAATTCATATACACAGAACTG
CAGCTGTCAGTGTGAGGACAACAGAGGACCTAAAGGAAAAGTGTGTAGATGAAACTTTTCTAGATTCCAAG
TGTTTCCAGTGTGATGAGAATAAATGTCATTTTGATGAAGATCAGTTTTTCTTCTGAGAGTTGCAAGTCAC
ACAAGGATCAGCCTGTTTGCAGTGGTCGAGGAGTTTGTGTTTGTGGGAAATGTTTCATGTCACAAAAATTA
GCTTGGAAAAGTGTATGGAAAATACTGTGAAAAGGATGACTTTTCTTGTCCATATCACCATGGAAATCTG
TGTGCTGGGCATGGAGAGTGTGAAGCAGGCAGATGCCAATGCTTCAGTGGCTGGGAAGGTGATCGATGCC
AGTGCCCTTCAGCAGCAGCCAGCACTGTGTCAATTCAAAGGGCCAAGTGTGCAGTGAAGAGGCACGTG
TGTGTGTGAAGGTGTGAGTGCACCGATCCAGGAGCATCGGCCGCTTCTGTGAACACTGCCCCACCTGT
TATACAGCCTGCAAGGAAAACCTGGAATTGTATGCAATGCCTTCACCTCACAAATTTGTCTCAGGCTATAC
TTGATCAGTGCAAAACCTCATGTGCTCTCATGGAACAACAGCATTATGTCGACCAAACCTCAGAATGTTT
CTCCAGCCCAAGCTACTTGAGAATATTTTTTCATCATTTTCATAGTTACATTCTTGATTGGGTTGCTTAAA
GTCCTGATCATTAGACAGGTGATACTACAATGGAATAGTAATAAAAATTAAGTCCTCATCAGATTACAGAG
TGTGAGCCTCAAAAAAGGATAAGTTGATTCTGCAAAGTGTGTCACAAGAGCAGTCACCTACCGACGTGA
GAAGCCTGAAGAAATAAAAATGGATATCAGCAAATTAATGCTCATGAACTTTTCAGGTGCAACTTCTAA
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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002214 unedited  
 GGGCGGCCCGCAATTCGCACGAGGGGACTGCGGGACGCCTGAGCCGCGCACTGAGGCGA  
 AAAGGACAAGGGCACGCAGCCCCCGCCCGGAAGCCGGGCTCCGGCACCTCGCGGAACC  
 TCCCCTCTGCGCTCGCAGCCGACAGGCCCACTCCCCGCCAGGGAGGGAGCGGGATGCC  
 TCGCTCTGTGCCTGCGGGTGTGCGGGGTGCTTCTAGGGCGCTCCAGAGCCGCCTCCCC  
 CTGTTGCTGGCATCCCCAGCTTCTCCTCCCTTGCCAGCCAGGACGCTGCCGACTTGTCTTTG  
 CCCGCTGCTCCGCAGACGGGGTGC AAAAGCTGCAACTAATGGTGTGGCCTCCCTGCCCA  
 CCTGTGGAAGCAACTGCGCTGATTGATGCGCCACAGACTTTTTTCCCTCGACCTCGCCG  
 GCGTCCCCCTCCCACAGATCCAGCATCACCCAGTGAATGTACATTAGGGTGGTTTTCCCCC  
 CAGCTTCGGGCTTTGTTGGGTTTGATTGTGTTGGCTCTTCGCTAAGCTGATTTATGCA  
 GCAGAAGCCCCACCGGCTGGAGAGAAAACAAAAGCTTTTTCTTTGTCCAGGAGCANGCTG  
 CGGAGCCCTTGACAGACCCTCTCCTCCAGTCGCCGCCGGAGCCCTTGCCGTCGAAGGAAG  
 TGCTTCTCGGGAGACCGGGACCCGCCGTGCCGAGCCGGGAGGGCCGAGGGGCCCTG  
 AGATGCCGAGCGGTGCCGGGCCGCTTACCTGCACCGCTTGCTCCGAGCCGGGGTCC  
 GNCTGCTNAGCCTGCNGAAAACGTCCTANCGACTCGNCCGGGGCCCGAGGTGCGC  
 CGCGGAGGCGCGAGCCCCGGTCCGGAAGGAANCAGCCGGCGGCCGCGGGGGCTGTTTG  
 CATTAGTGCCTCGCCCTG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_002214 unedited  
 GTTTACTGNACCCGGCCGATTCTAGGATCGAGTTTTTTTTTTTTTTTTTTTAAAGAT  
 GAAACACGAATCATTTATTCATCTAGCTGTTCTTGTCTATTCAACCACCAACTGTTGAAG  
 TGTTTGGCAACCTTAGAATATACTTGCCAGATTATTTTTTCTCACATGTCCAGTGCAG  
 GGATTACTGTACCTTGTAGTGACACAATGCTAAACTCTCTCACAGCATTGTTCTCTCTG  
 GGAAGCGTAGGGATAACAGGTACCTGTAAGTGAATCAGTGCTCTTCAGAGGATCTACA  
 TTCTATGCTGATCTAAATAAGTTATATATTACAGTAAAGTGTACAACGACACTAGTCTC  
 AAACAGTAGTAAGACACATTTTTCTCTGAAAAAGTCAGCAGCTATGTGAGTCACATCATG  
 ATGAGGATACTTGTGAGTCTTCGTTTCGAGTGTACAACCAGCAACTGGCATGACCGTGAGC  
 AATTTGCCTCCTCCTGTGACTTTTTAAAATTATAATCTTTAGGAGCAATTATTAACAATTC  
 CAGTCTTCCCATTAAAGTGTAAAAATCCTTTTTTACAAGTCGCACCTGAAAGCCCATGA  
 GCCTTCAATCCCGCTGCTATCCATTCTTATTTCTCAGGCCTCTCACGTCCGTAGGCGAT  
 CGCTCTTGGGCCAACACTTTGCAGAATCAACCTATCCTTTTTTTGAGGCTGCCCTCTGCC  
 ATCCCCGAGGCCCAACGCCCCAGCACCCCTCGCAATCTCCACCTGCCCAATGATC  
 CAGGATTTTCACTCATCCCCATTTCCAATGCTCCCTTCTACTGATGAAATACCTCCCC  
 GGTAGCTTGTCTTGACCCACAATTCCTTAGCCCTGTCATCTTATGCCTCTCTCCCCTTAC  
 ACCACCCAGCCCCACCCTCAAAC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_002214

**Insert Size:**

4000 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_002214.1](#), [NP\\_002205.1](#)

**RefSeq Size:** 8787 bp

**RefSeq ORF:** 8787 bp

**Locus ID:** 3696

**UniProt ID:** [P26012](#)

**Cytogenetics:** 7p21.1

**Domains:** INB, PSI

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cell adhesion molecules (CAMs), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Regulation of actin cytoskeleton

**Gene Summary:** This gene is a member of the integrin beta chain family and encodes a single-pass type I membrane protein with a VWFA domain and four cysteine-rich repeats. This protein noncovalently binds to an alpha subunit to form a heterodimeric integrin complex. In general, integrin complexes mediate cell-cell and cell-extracellular matrix interactions and this complex plays a role in human airway epithelial proliferation. Alternatively spliced variants which encode different protein isoforms have been described; however, not all variants have been fully characterized. [provided by RefSeq, Jul 2008]