

Product datasheet for **RG222336**

Integrin beta 8 (ITGB8) (NM_002214) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin beta 8 (ITGB8) (NM_002214) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Integrin beta 8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG222336 representing NM_002214
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGCGGCTCGGCCCTGGCTTTTTTTACCGCTGCATTTGTCTGCCTGCAAAACGACCGCGGAGGTCCCG
 CCTCGTTCCTCTGGGCAGCCTGGGTGTTTTCACTTGTTCTTGGACTGGGCCAAGGTGAAGACAATAGATG
 TGCATCTTCAAATGCAGCATCCTGTGCCAGGTGCCTTGCCTGGGTCCAGAATGTGGATGGTGTGTTCAA
 GAGGATTTCAATTCAGGTGGATCAAGAAGTGAACGTTGTGATATTGTTTCCAATTTAATAAGCAAAGGCT
 GCTCAGTTGATCAATAGAAATACCCATCTGTGCATGTTATAATACCCACTGAAAAATAATACCCA
 GGTGACACCAGGAGAAGTGTCTATCCAGCTGCGTCCAGGAGCCGAAGCTAATTTTATGCTGAAAGTTCAT
 CCTCTGAAGAAATATCCTGTGGATCTTTATTATCTTGTGATGTCTCAGCATCAATGCACAATAATATAG
 AAAAAATAAATCCGTTGGAAACGATTTATCTAGAAAAATGGCATTCTCCCGTGACTTTCGTTGG
 ATTTGGCTCATACGTTGATAAAACAGTTTACCACATACATTAGCATCCACCCGAAAGGATTCATAATCAA
 TGCACTGACTACAATTTAGACTGCATGCCTCCCATGGATACATCCATGTGCTGTCTTTGACAGAGAACA
 TCACTGAGTTTGAGAAAGCAGTTCATAGACAGAAGATCTCTGAAACATAGATACACCAGAAGGAGGTTT
 TGACGCCATGCTTCAGGCAGCTGTCTGTGAAAGTCATATCGGATGGCGAAAAGAGGCTAAAAGATTGCTG
 CTGGTGATGACAGATCAGACGCTCATCTCGCTCTTGATAGCAAATGGCAGGCATAGTGGTGCCCAATG
 ACGGAACTGTCTGAAAAACAACGTCATGTCAAATCGACAACCATGGAACACCCCTCACTAGGCCA
 ACTTTAGAGAAATTAAGACAACAACATTAATGTCACTTTGCAGTTCAAGGAAAACAATTTCAATGG
 TATAAGGATCTTCTACCCCTCTTGCCAGGCACCATTTGCTGGTGAATAGAATCAAAGGCTGCAAACTCA
 ATAATTTGGTAGTGGAAGCCTATCAGAAGCTCATTTCAGAAGTGAAGTTCAAGGTGAAAACAGGTACA
 AAGCATCTATTTAACATTACCGCCATCTGTCCAGATGGGTCCAGAAAGCCAGGCATGGAAGGATGCAGA
 AACGTGACGAGCAATGATGAAGTCTTTTCAATGTAACAGTTACAATGAAAAATGTGATGTCACAGGAG
 GAAAAAATATGCAATAATCAAACCTATTGGTTTTAATGAAACCGCTAAAATTCATATACACAGAACTG
 CAGCTGTCAGTGTGAGGACAACAGAGGACCTAAAGGAAAGTGTGTAGATGAAACTTTTCTAGATTCCAAG
 TGTTTCCAGTGTGATGAGAATAAATGTCATTTTGATGAAGATCAGTTTTCTTCTGAGAGTTGCAAGTCAC
 ACAAGGATCAGCCTGTTGTCAGTGGTCGAGGAGTTTGTGTTTGTGGGAAATGTTTCATGTCACAAAATTA
 GCTTGAAAAGTGTATGAAAAAATGTAAGGATGACTTTTCTTGTCCATATCACCATGAAAATCTG
 TGTGCTGGGCATGGAGAGTGTGAAGCAGGCAGATGCCAATGCTTCAGTGGCTGGGAAGGTGATCGATGCC
 AGTGCCCTTCAGCAGCAGCCAGCACTGTGTCAATTCAAAGGGCCAAGTGTGAGTGGAAAGGCACGTG
 TGTGTGGAAGGTGTGAGTGCACCGATCCCAGGAGCATCGGCCGCTTCTGTGAACACTGCCCCACCTGT
 TATACAGCCTGCAAGGAAAATGGAATTGTATGCAATGCCTTCACCTCACAATTTGCTCAGGCTATAC
 TTGATCAGTGCAAAACCTCATGTGCTCTCATGGAACAACAGCATTATGTCGACCAAACTTCAGAATGTTT
 CTCCAGCCCAAGCTACTTGAGAATTTTTTTCATCATTTTCATAGTTACATTCTTGATTGGGTTGCTTAA
 GTCCTGATCATTAGACAGGTGATACTACAATGGAATAGTAATAAAATTAAGTCTCATCAGATTACAGAG
 TGTCAGCCTCAAAAAGGATAAGTTGATTCTGCAAAGTGTGGCACAAGAGCAGTCACCTACCGACGTGA
 GAAGCCTGAAGAAATAAAATGGATATCAGCAAATTAATGCTCATGAACTTTCAAGGTGCAACTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG222336 representing NM_002214
Red=Cloning site Green=Tags(s)

MCGSALAFFTAAFVCLQNDRRGPASFLWAAWVSLVLGLGQGEDNRCASSNAASCARCLALGPECGWCVQ
 EDFISGGSRSERCDIVSNLISKGCSVDSIEYPSVHVIIPTENEINTQVTPGEVSIQLRPGAANFMLKVH
 PLKKYPVDLYLVDVSASMHNNIEKLSVGNLDRKMAFFSRDFRLGFGSYVDKTVSPYISIHPERIHNQ
 CSDYNLDCMPPHGYIHVLSLTENITFEKAVHRQKISGNIDTPEGGFDAQLQAAVCESHIGWRKEAKRLL
 LVMTDQTSHLALDSKLAGIVVPPNDGNCHLKNNVYVKSTTMEHPSLQGLSEKLDNNINVIFAVQKQFHW
 YKDLLPLLPGTIAGEIESKAANLNNLVVEAYQKLISEVKVQVENQVQGIYFNITAICPDGSRKPGMEGCR
 NVTSNDEVLFNVTVTMKKCDVTGGKNYAIKPIGFNETAKIHIHRNCSCQCEDNRGPKGKCVDETFLDSK
 CFQCDENKCHFDEDQFSSECKSHKDQPVCSGRGVCVCGKCSCHKIKLKGKYYGKYCEKDDFSCPYHHGNL
 CAGHGECEAGRCQCFSGWEGDRCQCPASAAQHCVNSKGQVCSGRGTCVCGRCECTDPRSIGRFCEHCPTC
 YTACKENWNCMQCLPHNLQAILDQCKTSCALMEQQHYVDQTSECFSSPSYLRIFFIIFIVTFLIGLLK
 VLIIHQVILQWNSNKIKSSSDYRVSASKDKLILQSVCTRAVYRREKPEEIKMDISKLNHETFRCNF

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1962_a07.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



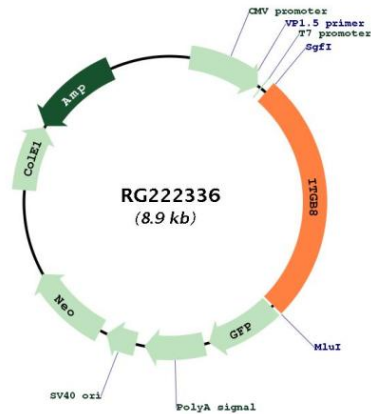
ACCN: NM_002214

ORF Size: 2307 bp

OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<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_002214.3
RefSeq Size:	8787 bp
RefSeq ORF:	2310 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]

Product images:


Circular map for RG222336