

## Product datasheet for **RG226157**

### CD18 (ITGB2) (NM\_001127491) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD18 (ITGB2) (NM_001127491) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ITGB2
Synonyms:	CD18; LAD; LCAMB; LFA-1; MAC-1; MF17; MFI7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG226157 representing NM\_001127491  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGGGCTGCGCCCCACTGCTCGCCTGGTGGGCTGCTCTCCCTCGGGTGGTCTCTCTCAGG  
 AGTGCACGAAGTTCAAGGTCAGCAGCTGCCGGAATGCATCGAGTCGGGGCCCGGCTGCACCTGGTGCCA  
 GAAGCTGAACTTACAGGGCCGGGGATCCTGACTCCATTCGCTGCGACACCCGGCCACAGCTGCTCATG  
 AGGGGCTGTGCGGCTGACGACATCATGGACCCACAAGCCTCGCTGAAACCCAGGAAGACCACAATGGGG  
 GCCAGAAGCAGCTGTCCCACAAAAAGTGACGCTTTACCTGCGACCAGGCCAGGCAGCAGCGTTCAACGT  
 GACCTTCCGGCGGCCAAGGGCTACCCATCGACTGTACTATCTGATGGACCTCTCTACTCCATGCTT  
 GATGACCTCAGGAATGTCAAGAAGCTAGGTGGCAGCTGCTCCGGGCCCTCAACGAGATCACCGAGTCCG  
 GCCGATTGGCTTCGGTCTTCGTGGACAAGACCGTGTGCCGTTTCGTGAACACGCACCCTGATAAGCT  
 GCGAAACCATGCCCAACAAGGAGAAAGAGTGCCAGCCCCGTTTGCCTTCAGGCACGTGCTGAAGCTG  
 ACCAACAACCTCAACAGTTTCAGACCCAGGTCGGGAAGCAGCTGATTTCCGGAAACCTGGATGCACCCG  
 AGGGTGGGCTGGACGCCATGATGCAAGTGCAGGCTGCCCGCTGCCCGGAGGAAATCGGCTGGCGCAACGTCACCGG  
 GCTGCTGGTGTGGCCACTGATGACGGCTTCCATTTCCGGGGCGACGGGAAGCTGGGCGCCATCCTGACC  
 CCCAACGACGGCCGCTGTACCTGGAGGACAATTGTACAAGAGGAGCAACGAATTCGACTACCCATCGG  
 TGGGCCAGCTGGCGCACAAAGCTGGCTGAAAACAACATCCAGCCCATCTTCGCGGTGACCAGTAGGATGGT  
 GAAGACCTACGAGAACTCACCGAGATCATCCCAAGTCAGCCGTGGGGGAGCTGTCTGAGGACTCCAGC  
 AATGTGGTCCAACCTATTAAGAATGCTTACAATAAACTCTCTCCAGGGTCTTCTGGATCACAACGCCC  
 TCCCCGACACCTGAAAGTCACCTACGACTCCTTCTGCAGCAATGGAGTGACGCACAGGAACAGCCAG  
 AGGTGACTGTGATGGCGTGCAGATCAATGTCCTCCGATCACCTTCCAGGTGAAGGTACAGGCCACAGAGTGC  
 ATCCAGGAGCAGTCGTTTGTATCCGGCGCTGGGCTTACGGACATAGTGACCGTGCAGGTTCTTCCCC  
 AGTGTGAGTGCCGGTCCCGGACAGAGCAGAGACCGCAGCCTTGCCATGGCAAGGGCTTCTTGAGTG  
 CGGCATCTGCAGGTGTGACTGGCTACATTGGGAAAACTGTGAGTGCCAGACACAGGGCCGGAGCAGC  
 CAGGAGCTGGAAGGAAGCTGCCGAAGGACAACAACCTCCATCATCTGCTCAGGGCTGGGGGACTGTGTCT  
 GCGGGCAGTGCCGTGCCACACCAGCGACGTCCCCGCAAGCTGATATACGGGCAGTACTGCGAGTGTGA  
 CACCATCAACTGTGAGCGCTACAACGGCCAGGTCTGCGGCGCCCGGGGAGGGGGCTCTGCTTCTCGGG  
 AAGTGCCGCTGCCACCCGGGCTTTGAGGGCTCAGCGTGCCAGTGCGAGAGGACACTGAGGGCTGCCTGA  
 ACCCGCGCGTGTGAGTGTAGTGGTCTGGCCGGTGCCGCTGCAACGTATGCGAGTGCCATTCAGGCTA  
 CCAGCTGCCTCTGTGCCAGGAGTGCCCCGGCTGCCCTCACCCCTGTGGCAAGTACATCTCTGCGCCGAG  
 TGCCCTGAAGTTCGAAAAGGGCCCTTTGGGAAGAACTGCAGCGCGGCGTGTCCGGCCCTGCAGCTGTGGA  
 ACAACCCCGTGAAGGGCAGGACCTGCAAGGAGAGGGACTCAGAGGGCTGCTGGGTGGCCTACACGCTGGA  
 GCAGCAGGACGGGATGGACCGCTACCTCATCTATGTGGATGAGAGCCGAGAGTGTGTGGCAGGCCCAAC  
 ATCGCCGCCATCGTCGGGGCACCGTGGCAGGCATCGTGTGATCGGCATTCTCTGCTGGTTCATCTGGA  
 AGGCTCTGATCCACCTGAGCGACCTCCGGGAGTACAGGCGCTTTGAGAAGGAGAAGCTCAAGTCCCAGTG  
 GAACAATGATAATCCCCTTTTCAAGAGCGCCACCACGACGGTTCATGAACCCCAAGTTTGTGAGAGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG226157 representing NM\_001127491  
 Red=Cloning site Green=Tags(s)

MLGLRPPLLALVGLLSLGCVLSQECTKFKVSSCRECIESGPGCTWCQKLNFTGPGDPDSIRCDTRPQLLM  
 RGCAADDIMDPTSLAETQEDHNGGQKQLSPQKVTLYLRPGQAAAFNVTFRRAKGYPIDLYLMDLSYSML  
 DDLRNVKLLGGDLLRALNEITESGRIGFGSFVDKTVLPFVNTHPDKLRNPCPNKEKECQPPFAFRHVLKL  
 TNNSNQFQTEVKGQLISGNLDAPEGGLDAMMQVAACPEEIGWRNVTRLLVFATDDGFHFAGDGKLGAILT  
 PNDGRCHLEDNLYKRSNEFDYPSVQLAHKLAENNIQPIFAVTSRMVKTYEKLTEIIPKSAVGELSEDSS  
 NVVQLIKNAYNKLSSRVFLDHNALPDTLKVTYDSFCSNGVTHRNQPRGDCDGVQINVPITFQVKVTATEC  
 IQEQSFVIRALGFTDIVTVQVLPQCECRDQSRDRSLCHGKGFLECGICRCDTGYIGKNCECQTQGRSS  
 QELEGSCRKNNSIICSLGDCVCGQCLCHTSDVPGKLIYGQYCECDTINCERYNGQVCGGPGRGLCFCG  
 KCRCHPGFEFSACQCERTTEGCLNPRRVECSGRGRRCNVCECHSGYQLPLCQCEPCGSPCGKYISCAE  
 CLKFEKGFPGKNCSAACPLQLSNPVKGRGTCKERDSEGCWVAYTLEQQDGMRYLIYVDESRECVAGPN  
 IAAIVGGTVAGIVLIGILLVIWKALIHLSDLREYRRFEKEKLSQWNNNDNPLFKSATTVMNPKFAES

TRTRPLE - GFP Tag - V

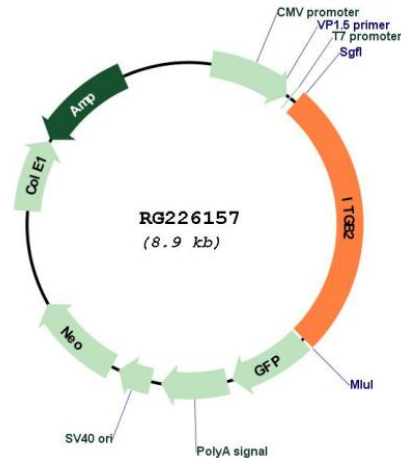
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_001127491

ORF Size: 2307 bp

**OTI Disclaimer:** 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](#)

**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:**

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\\_001127491.1](#), [NP\\_001120963.1](#)

RefSeq Size: 2932 bp

RefSeq ORF: 2310 bp

Locus ID: 3689

<b>UniProt ID:</b>	<u>P05107</u>
<b>Cytogenetics:</b>	21q22.3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity, Regulation of actin cytoskeleton, Viral myocarditis
<b>Gene Summary:</b>	This gene encodes an integrin beta chain, which combines with multiple different alpha chains to form different integrin heterodimers. Integrins are integral cell-surface proteins that participate in cell adhesion as well as cell-surface mediated signalling. The encoded protein plays an important role in immune response and defects in this gene cause leukocyte adhesion deficiency. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]