

Product datasheet for **RC226157**

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:	Myc-DDK
Symbol:	CD18
Synonyms:	CD18; LAD; LCAMB; LFA-1; MAC-1; MF17; MFI7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC226157 representing NM_001127491
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGGCTGCGCCCCACTGCTCGCCTGGTGGGGCTGCTCTCCCTCGGGTGGCTCTCTCAGG
 AGTGCACGAAGTTCAAGGTCAGCAGCTGCCGGGAATGCATCGAGTCGGGGCCCGGCTGCACCTGGTGCCA
 GAAGCTGAACTTACAGGGCCGGGGATCCTGACTCCATTCGCTGCGACACCCGGCCACAGCTGCTCATG
 AGGGGCTGTGCGGCTGACGACATCATGGACCCACAAGCCTCGCTGAAACCCAGGAAGACCACAATGGGG
 GCCAGAAGCAGCTGTCCCACAAAAAGTGACGCTTTACCTGCGACCAGGCCAGGCAGCAGCGTTCAACGT
 GACCTTCCGGCGGGCCAAGGGCTACCCATCGACTGTACTATCTGATGGACCTCTCTACTCCATGCTT
 GATGACCTCAGGAATGTCAAGAAGCTAGGTGGCAGCTGCTCCGGGCCCTCAACGAGATCACCGAGTCCG
 GCCGATTGGCTTCGGTCTTCGTGGACAAGACCGTGTGCCGTTTCGTGAACACGCACCCTGATAAGCT
 GCGAAACCATGCCCAACAAGGAGAAAGAGTGCCAGCCCCGTTTGCCTTCAGGCACGTGCTGAAGCTG
 ACCAACAACCTCAACAGTTTCAGACCCAGGTCGGGAAGCAGCTGATTTCCGGAAACCTGGATGCACCCG
 AGGGTGGGCTGGACGCCATGATGCAAGTGCAGGCTGCCCGCTGCCCGGAGGAAATCGGCTGGCGCAACGTCACCGG
 GCTGCTGGTGTGGCCACTGATGACGGCTTCCATTTCCGGGGCGACGGGAAGCTGGGCGCCATCCTGACC
 CCCAACGACGGCCGCTGTACCTGGAGGACAATTGTACAAGAGGAGCAACGAATTCGACTACCCATCGG
 TGGGCCAGCTGGCGCACAAAGCTGGCTGAAAACAACATCCAGCCCATCTTCGCGGTGACCAGTAGGATGGT
 GAAGACCTACGAGAACTCACCGAGATCATCCCAAGTCAGCCGTGGGGGAGCTGTCTGAGGACTCCAGC
 AATGTGGTCCAACCTATTAAGAATGCTTACAATAAACTCTCTCCAGGGTCTTCTGGATCACAACGCC
 TCCCCGACCCCTGAAAGTCACCTACGACTCCTTCTGCAGCAATGGAGTGACGCACAGGAACCCAGCCAG
 AGGTGACTGTGATGGCGTGCAGATCAATGTCCCGATCACCTTCCAGGTGAAGGTACAGGCCACAGAGTGC
 ATCCAGGAGCAGTCGTTTGTATCCGGCGCTGGGCTTACGGACATAGTGACCGTGCAGGTTCTTCCCC
 AGTGTGAGTGCCGGTCCCGGACAGAGCAGAGACCGCAGCCTCTGCCATGGCAAGGGCTTCTTGAGTG
 CGGCATCTGCAGGTGTGACTGGCTACATTGGGAAAACTGTGAGTGCCAGACACAGGGCCGGAGCAGC
 CAGGAGCTGGAAGGAAGCTGCCGGAAGGACAACAACCTCCATCATCTGCTCAGGGCTGGGGGACTGTGTCT
 GCGGGCAGTGCCGTGCCACACCAGCGACGTCCCCGGCAAGCTGATATACGGGCAGTACTGCGAGTGTGA
 CACCATCAACTGTGAGCGCTACAACGGCCAGGTCTGCGGCGCCCGGGGAGGGGGCTCTGCTTCTCGGG
 AAGTGCCGCTGCCACCCGGGCTTTGAGGGCTCAGCGTGCCAGTGCGAGAGGACACTGAGGGCTGCCTGA
 ACCCGCGCGTGTGAGTGTAGTGGTCTGGCCGGTGCCGCTGCAACGTATGCGAGTGCCATTCAGGCTA
 CCAGCTGCCTCTGTGCCAGGAGTGCCCCGGCTGCCCTCACCTGTGGCAAGTACATCTCTGCGCCGAG
 TGCTGAAGTTCGAAAAGGGCCCTTTGGGAAGAACTGCAGCGCGGCGTGTCCGGCCCTGCAGCTGTGGA
 ACAACCCCGTGAAGGGCAGGACCTGCAAGGAGAGGGACTCAGAGGGCTGCTGGGTGGCCTACACGCTGGA
 GCAGCAGGACGGGATGGACCGCTACCTCATCTATGTGGATGAGAGCCGAGAGTGTGTGGCAGGCCCAAC
 ATCGCCGCCATCGTCGGGGCACCGTGGCAGGCATCGTGTGATCGGCATTCTCTGCTGGTTCATCTGGA
 AGGCTCTGATCCACCTGAGCGACCTCCGGGAGTACAGGCGCTTTGAGAAGGAGAAGCTCAAGTCCCAGTG
 GAACAATGATAATCCCCTTTTCAAGAGCGCCACCACGACGGTTCATGAACCCCAAGTTTCTGAGAGT

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226157 representing NM_001127491
Red=Cloning site Green=Tags(s)

```

MLGLRPPLLALVGLLSLGCVLSQECTKFKVSSCRECIESGPGCTWCQKLNFTGPGDPDSIRCDTRPQLLM
RGCAADDIMDPTSLAETQEDHNGGQKQLSPQKVTLYLRPGQAAAFNVTFRRAKGYPIDLYYLMDLSYSML
DDL RNVKKGDDLRLALNEITESGRIGFGSFDKTVLPFVNTHPDKLRNPCPNKEKQPPFAFRHVLKL
TNNSNQFQTEVGVKQLISGNLDAPEGGLDAMMQVAACPEEIGWRNVTRLLVFATDDGFFHAGDGKLGAILT
PNDGRCHLEDNLYKRSNEFDYPSVQQLAHKLAENNIQPIFAVTSRMVKTYEKLTEIIPKSAVGELSEDSS
NVVQLIKNAYNKLSSRVFLDHNALPDTLKVITYDSFCSNGVTHRNQPRGDCDGVQINVPITFQVKVTATEC
IQEQSFVIRALGFTDIVTVQVLPQCECRDQSRDRSLCHGKGFLECGICRCDTGYIGKNCECQTQGRSS
QELEGSCRKDNNSIICSLGDCVCGQCLCHTSDVPGKLIYGQYCECDTINCERYNGQVCGGPGRGLCFCG
KCRCHPGFEFSACQCERTTEGCLNPRRVECSGRGRCRCNVCECHSGYQLPLCQCEPCGSPCGKYISCAE
CLKFEKGFPGKNC SAACPLQLSNPVKGRGTCKERDSEGCWVAYTLEQQDGM DRYLIYVDESRECVAGPN
IAAIVGGTVAGIVLIGILLVIWKAL IHLSDLREYRRFEKEKLSQWNNNDNPLFKSATTVMNPKFAES
    
```

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6156_c10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001127491

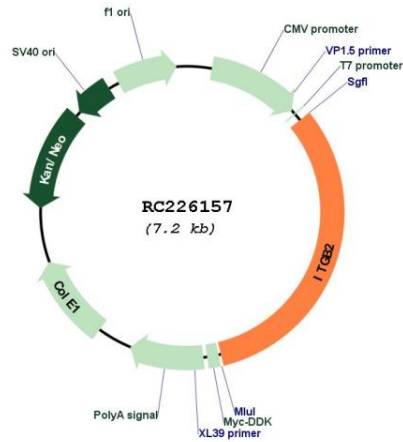
ORF Size: 2307 bp

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](#)

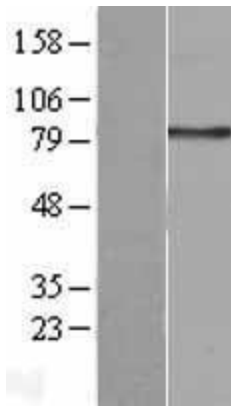
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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:	<u>NM_001127491.1</u> , <u>NP_001120963.1</u>
RefSeq ORF:	2310 bp
Locus ID:	3689
UniProt ID:	<u>P05107</u>
Cytogenetics:	21q22.3
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity, Regulation of actin cytoskeleton, Viral myocarditis
MW:	84.78 kDa
Gene Summary:	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]

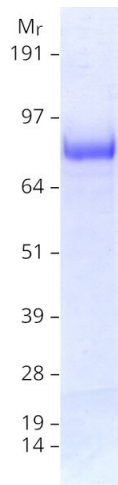
Product images:



Circular map for RC226157



Western blot validation of overexpression lysate (Cat# [LY426800]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226157 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ITGB2 protein (Cat# [TP326157]). The protein was produced from HEK293T cells transfected with ITGB2 cDNA clone (Cat# RC226157) using MegaTran 2.0 (Cat# [TT210002]).