

Product datasheet for **RC200731**

Integrin beta 5 (ITGB5) (NM_002213) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin beta 5 (ITGB5) (NM_002213) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Integrin beta 5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC200731 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGCCCGGGCCCCGGCGCCGTGTACGCCTGCCTCCTGGGGCTCTGCGCGCTCCTGCCCGGCTCGCAG
GTCTCAACATATGCACTAGTGGAAGTGCCACCTCATGTGAAGAATGTCTGCTAATCCACCCAAAAATGTGC
CTGGTGCTCCAAAGAGGACTTCGGAAGCCACGGTCCATCACCTCTCGGTGTGATCTGAGGGCAAACCTT
GTCAAAAAATGGCTGTGGAGGTGAGATAGAGAGCCAGCCAGCAGCTTCCATGTCTGAGGAGCCTGCCCC
TCAGCAGCAAGGGTTCGGGCTCTGCAGGCTGGGACGTCATTAGATGACACCACAGGAGATTGCCGTGAA
CCTCCGGCCCGGTGACAAGACCACCTTCCAGCTACAGGTCGCCAGGTGGAGGACTATCCTGTGGACCTG
TACTACCTGATGGACCTCCTCCTGTCCATGAAGGATGACTTGGACAATATCCGGAGCCTGGGCACCAAC
TCGCGGAGGAGATGAGGAAGCTCACCAGCAACTCCGGTTGGGATTTGGGTCTTTTGTGATAAGGACAT
CTCTCCTTTCTCTACACGGCACCGAGGTACCAGACCAATCCGTGCATTGTTACAAGTTGTTTCCAAT
TGGCTCCCTCCTTTGGGTTCCGCCATCTGCTGCCTCTCACAGACAGAGTGGACAGCTTCAATGAGGAAG
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CGTCTGCAAGGAGAAGATTGGCTGGCGAAAGGATGCACTGCATTTGCTGGTGTTCAACAGATGATGTG
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AGGCCAACGAGTACACTGCATCCAACAGATGGACTATCCATCCCTTGCCTTGCCTGGAGAGAAATTGGC
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CATACAATAGTATCCGGTCTAAAGTGGAGTTGTCACTGCGGATCAGCCTGAGGATCTTAATCTCTTCTT
TACTGCTACCTGCAAGATGGGGTATCCTATCCTGGTCAGAGGAAGTGTGAGGGTCTGAAGATTGGGGAC
ACGGCATCTTTTGAAGTATCATTGGAGGCCGAAGCTGTCCAGCAGACACACGGAGCATGTGTTTGCCC
TGCGGCCGGTGGGATTCCGGGACAGCCTGGAGGTGGGGTACCTACAACCTGCACGTGCGCTGCAGCGT
GGGGCTGGAACCAACAGTGCCAGGTGCAACGGGAGCGGGACCTATGTCTGCGCCTGTGTGAGTGCAGC
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TGCCCCGATGCATGCAGCACAAGAGAGATTGCGTTCGAGTGCCTGCTGCTCCACTCTGGGAAACCTGACA
ACCAGACCTGCCACAGCCTATGCAGGGATGAGGTGATCAGATGGGTGGACACCATCGTGAAGATGACCA
GGAGGCTGTGCTATGTTTCTACAAAACCGCCAAGGACTGCGTCATGATGTTACCTATGTGGAGCTCCCC
AGTGGGAAGTCCAACCTGACCGTCTCAGGGAGCCAGAGTGTGGAACACCCCAACGCCATGACCATCC
TCCTGGCTGTGGTCGGTAGCATCCTCCTTGTGGGCTTGCACTCCTGGCTATCTGGAAGCTGCTTGTAC
CATCCACGACCGAGGGAGTTTGCAAAGTTTCAGAGCGAGCGATCCAGGGCCCGCTATGAAATGGCTTCA
AATCCATTATACAGAAAGCCTATCTCCACGCACACTGTGGACTCACCTCAACAAGTTCAACAAATCCT
ACAATGGCACTGTGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200731 protein sequence
Red=Cloning site Green=Tags(s)

MPRAPAPLYACLLGLCALLPRLAGLNICTSGSATSCEECLLIHPKCAWCSKEDFGSPRSITSRCDLRANL
VKNGCGGEIESPASSFHVLRSLPLSSKSGSAGWDVIQMPQEIAVNLRPDKTTFQLQVRQVEDYPVDL
YYLMDLSLSMKDDLNIIRSLGKLAEMRKLTSNFRLGFGSFVDKDISPF SYTAPRYQTNPICIGYKLFNP
CVPSFGFRHLLPLTDRVDSFNEEVRKQVSRNRDAPEGGFDAVLQAAVCKEKIGWRKDALHLLVFTDDV
PHIALDGKLGGLVQPHDQCHLNEANEYASNQMDYPSLALLGEKLAENNINLIFAVTKNHMYLYKNFTA
LIPGTTVEILDGDSKNIQLIINAYNSIRSKVELSVWDQPEDLNLFFATCQDGVSYPGQRKCEGLKIGD
TASFEVSLEARSCPSRHTEHVFALRPVGFRRSLEVGVTYNCTCGCSVGLPNSARCNGSGTYVCGLCECS
PGYLGTRCECQDGENQSVYQNLCREAEGKPLCSGRGDCSCNQCSCFESEFGKIYGPFCEDNFSCARNKG
VLCSGHGECHGECKCHAGYIGDNCNCSTDI STCRGRDQICSERGHCLCGQCQCTEPGAFGEMCEKCPT
CPDACSTKRDCVECLLLHSGKPDNQTCHSLCRDEVITWVDTIVKDDQEAVLCFYKTAKDCVMMFTYVELP
SGKSNLTVLREPECGNTPNAMTILLAVVGSILLVGLALLAIWKLVTIHDRREFAKFQSERSRARYEMAS
NPLYRKPISTHTVDFTFNKFNKSYNGTVD

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6834_f09.zip

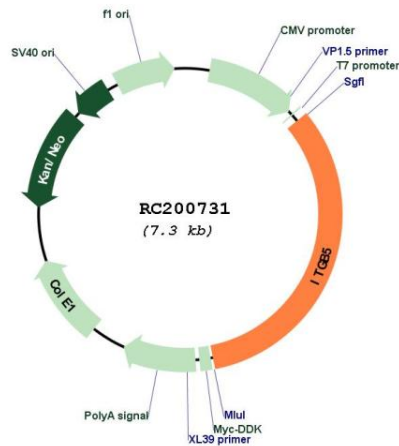
Restriction Sites: Sgfl-Mlul

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:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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:	<p>NM_002213.3, NP_002204.2</p>
RefSeq Size:	<p>3392 bp</p>
RefSeq ORF:	<p>2400 bp</p>
Locus ID:	<p>3693</p>
UniProt ID:	<p>P18084</p>
Cytogenetics:	<p>3q21.2</p>
Domains:	<p>VWA, INB, PSI, EGF</p>
Protein Families:	<p>Druggable Genome, Transmembrane</p>
Protein Pathways:	<p>Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Regulation of actin cytoskeleton</p>
MW:	<p>88.1 kDa</p>

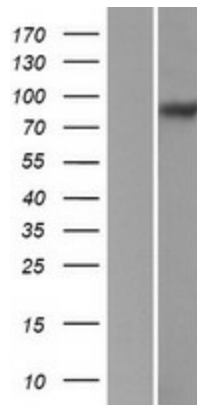
Gene Summary:

This gene encodes a beta subunit of integrin, which can combine with different alpha chains to form a variety of integrin heterodimers. Integrins are integral cell-surface receptors that participate in cell adhesion as well as cell-surface mediated signaling. The alpha_vbeta₅ integrin is involved in adhesion to vitronectin. [provided by RefSeq, Aug 2017]

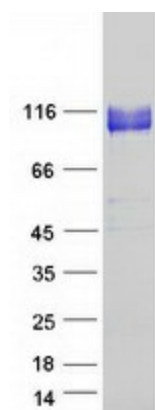
Product images:



Circular map for RC200731



Western blot validation of overexpression lysate (Cat# [LY419466]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200731 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ITGB5 protein (Cat# [TP300731]). The protein was produced from HEK293T cells transfected with ITGB5 cDNA clone (Cat# RC200731) using MegaTran 2.0 (Cat# [TT210002]).