

Product datasheet for **RC212617**

CD49b (ITGA2) (NM_002203) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD49b (ITGA2) (NM_002203) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD49b
Synonyms:	BR; CD49B; GPIa; HPA-5; VLA-2; VLAA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212617 representing NM_002203 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCCAGAACGGACAGGGGCCGCGCCGCTGCCGCTGCTGCTGGTGTAGCGCTCAGTCAAGGCATTT
TAAATTGTTGTTGGCCTACAATGTTGGTCTCCAGAAAGCAAAAATTTTCCGGTCTTCAAGTGAACA
GTTTGGCTATGCAGTGCAGCAGTTATAAATCCAAAAGGCAACTGGTTACTGGTTGGTCCACCTGGAGT
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AACTAAATTTGCAAACCTCAACAAGCATTCCAATGTTACTGAGATGAAAACCAACATGAGCCTCGGCTT
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TTGGGATGCAGTAAAGAATTTTTGGAAAAATTTGTACAAGGCCTGGATATAGGCCCCACAAGACACAG
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TTTGGTAGTGTGCTGTGTTCAAGTGTGATGTGGATAAAGACACCATTACAGACGTGCTCTTGGTAGGTGCAC
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TTTTGCTGTTAGCTCTGGTTGCAATTTATGGAAGCTCGGCTTCTTCAAAGAAAATATGAAAAGATGAC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212617 representing NM_002203
 Red=Cloning site Green=Tags(s)

MGPERTGAAPLPLLLVLALSQGILNCCLAYNVGLPEAKIFSGPSSEQFGYAVQQFINPKGWNLLVGSPWS
 GFPENRMGDVYKCPVDLSTATCEKLNLTSTISIPNVTEMKTNMSLGLILTRNMTGGFLTCGPLWAQCCG
 NQYTTTGVCSDISPDFQLSASFSPATQPCPSLIDVVVVCDESNSIYPWDAVKNFLEKFVQGLDIGPTKTQ
 VGLIQYANNPRVVFNLNTYKTKKEEMIVATSQTSQYGGDLTNTFGAIQYARKYAYSAAASGGRRSATKVMV
 VTDGESHDSMLKAVIDQCNDHNLRFGLAVLGYLNRNALDTKNLIKEIKAIASIPTERYFFNVSDEAAL
 LEKAGTLGEQIFSIIEGTVQGGDNFQMEMSQVGFSA DYSSQNDILMLGAVGAFGWSGTIVQKTSHGHLIFP
 KQAFDQILQDRNHSSYLGYSAAIISTGESTHFVAGAPRANYTGQIVLYSVNENGNITVIQAHRGDQIGSY
 FGSVLCSDVDVKDITDVLVVGAPMYSDLKKEEGRVYLFTIKEGILGQHQLFEGPEGIENTRFSAIAA
 LSDINMDGFNDVIVGSPLENQNSGAVYIYNHGQGTIRTKYSQKILGSDGAFRSHLQYFGRSLDGYGDLNG
 DSITDVSIGAFGQVVQLWSQSIADVAIEASF TPEKITLVNKNAQIILKLCFSAKFRPTKQNNQVAIVYNI
 TLDADGFSRVTSRGLFKENNERCLQKNMVNQAQSCPEHIIYIQEPSDVVNSLDL RVDISLENPGTSPA
 LEAYSETAKVFSIPFHKDCGEDGLCISDLVLDVRQIPAAQE QPFI VSNQNKRLTF SVTLKNKRESAYNTG
 IVVDFSENLFASFSLPVDGTEVTCQVAASQKSVACDVGYPALKREQQVTF TINFDFNLQNLQNAASLSF
 QALSESQEENKADNLVNLKIPLLYDAE IHLTRSTNINFYEISSDGNVPSIVHSFEDVGPKFIFSLKVTTG
 SVPVSMATVIIHIPQYTKENPLMYLTGVQTDKAGDISCNADINPLKIGQTSSSVSFKSENFRTKELNC
 RTASCNNVTCWLKDVHMKGEYFVNVTTRIWNGTFASSTFQTVQLTAAAEINTYNPEIYVIEDNTVTIPLM
 IMPKDEKAEVPTGVIIGSIIAGILLLLALVAILWKLGF FKRKYEKMTKNPDEIDETTELSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6169_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



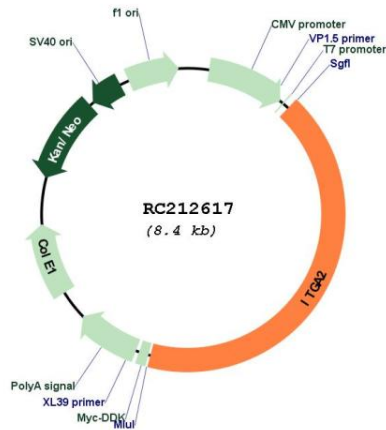
ACCN: NM_002203

ORF Size: 3543 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_002203.4
RefSeq Size:	5361 bp
RefSeq ORF:	3546 bp
Locus ID:	3673
UniProt ID:	P17301
Cytogenetics:	5q11.2
Domains:	FG-GAP, VWA
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hematopoietic cell lineage, Hypertrophic cardiomyopathy (HCM), Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung cancer
MW:	129.3 kDa

Gene Summary:

This gene encodes the alpha subunit of a transmembrane receptor for collagens and related proteins. The encoded protein forms a heterodimer with a beta subunit and mediates the adhesion of platelets and other cell types to the extracellular matrix. Loss of the encoded protein is associated with bleeding disorder platelet-type 9. Antibodies against this protein are found in several immune disorders, including neonatal alloimmune thrombocytopenia. This gene is located adjacent to a related alpha subunit gene. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

Product images:


Circular map for RC212617