

Product datasheet for **RG222614**

CD41 (ITGA2B) (NM_000419) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD41 (ITGA2B) (NM_000419) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ITGA2B
Synonyms:	BDPLT2; BDPLT16; CD41; CD41B; GP2B; GPIIb; GT; GT1; GTA; HPA3; PPP1R93
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222614 representing NM_000419 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGAGCTTTGTGTCCACTGCAAGCCCTCTGGCTTCTGGAGTGGGTGCTGCTCTTGGGACCTT
GTGCTGCCCTCCAGCCTGGGCTTGAACCTGGACCCAGTGCAGCTCACCTTCTATGCAGGCCCAATGG
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CTCAAGGCCCGCAAGGACTGGGGCGTCCGGTGTGAGTGGAGCGACGTCATTGTGGCCTGCGCCCCC
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CGAAAACCTGGCCGAAGTGGGCGTGTGTATTTGTTCTGTCAGCCGCGAGGCCCCACGCGTGGGTGCC
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CTACTGGTGAAGATTCCTGAATCCTGCTGTGAAGAGCTGTGTCTACCTCAGACCAAGACACCCGTGA
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 TGCTGGGTGGCCTGTGCTGCTCACCATCCTGGTCTGGCCATGTGGAAGGTGGCTTCTTCAAGCGGAA
 CCGGCCACCCCTGGAAGAAGATGATGAAGAGGGGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

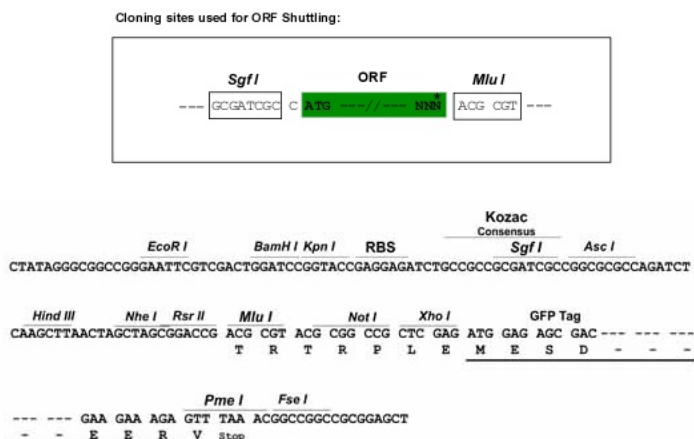
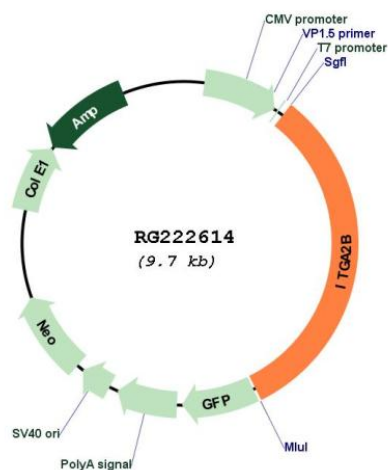
>RG222614 representing NM_000419
 Red=Cloning site Green=Tags(s)

MARALCPLQALWLEWLLLLGPCAAPPWALNLDPVQLTFYAGPNGSQFGFSLDFHKDSHRVAIVVGA
 PRTLGPSQEETGGVFLCPWRAEGGQCPSELLFDLRDETRNVGSQTLQTFKARQGLGASVVSWSVDIVACAP
 WQHWNVLEKTEEAETKTPVGSFLAQPESSRRRAEYSPCRGNTLSRIYVENDFSWDKRYCEAGFSSVVTQAG
 ELVLAGPGGYFLGLLAQAPVADIFSSYRPGILLWHVSSQSLFDSSNPEYFDGYWGYSVAVGEFDGDLN
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 RKLAEVGRVYFLQPRGPHALGAPSLLLTGTQLYGRFGSAIAPLGDLDLDGYNDAVAAPYGGPSGRGQV
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 GTTLNLDLGGKHSPICHTTMAFLRDEADFRDKLSPIVLSLVSLPPTTEAGMAPAVVLHGDTHTVQEQTRIV
 LDSEGDDVCVPQLQLTASVTGSPLLVGADNVLELQMDAANEGEGAYEAELAVHLPQGAHYMRALSNVEGF
 ERLICNQQKENETRVVLCELGNPMKNAQIGIAMLVSVGNLEEAGESVSFQLQIRSKNSQNPNSKIVLLD
 VPVRAEAQVELRNSFPASLVVAEEGEREQNSLDSWGPKEHTYELHNNPGPTVNLHLHLHLPQGSQP
 SDLLYILDIQPQGLQCFPPQPNPLKVDWGLPIPSPIHPAHHKRRRQIFLPEPEQPSRLQDPVLVS
 CDSAPCTVVQCDLQEMARGQRAMVTLAFLWLPSTYQRPLDQFVLQSHAWFNVSLLPYAVPPLSLPRGEA
 QVWTQLLRALEREAPIIWWLVGVLGLLLLLILVLA MWKVGFFKRNRPPLEEDDEEGE

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:

ACCN:

NM_000419

ORF Size:

3117 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_000419.2</u> , <u>NP_000410.1</u>
RefSeq Size:	3334 bp
RefSeq ORF:	3120 bp
Locus ID:	3674
UniProt ID:	<u>P08514</u>
Cytogenetics:	17q21.31
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, 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
Gene Summary:	This gene encodes a member of the integrin alpha chain family of proteins. The encoded preproprotein is proteolytically processed to generate light and heavy chains that associate through disulfide linkages to form a subunit of the alpha-IIb/beta-3 integrin cell adhesion receptor. This receptor plays a crucial role in the blood coagulation system, by mediating platelet aggregation. Mutations in this gene are associated with platelet-type bleeding disorders, which are characterized by a failure of platelet aggregation, including Glanzmann thrombasthenia. [provided by RefSeq, Jan 2016]