

## Product datasheet for **RR204350**

### **Itgb1 (NM\_017022) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Itgb1 (NM_017022) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Itgb1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RR204350 representing NM\_017022  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAATTTGCAACTGGTTTTCTGGATTGGATTGATCAGCTTGATTGTTCTGTATTTGGCCAACAGATA  
 AAAATAGATGTTTAAAAGCAAATGCCAAATCTTGTGGAGAATGTATACAAGCAGGGCCAAATTTGGGGT  
 GTGTACAATACGACATTTTTACAAGAAGGAATGCCTACTTCTGCACGATGTGATGATTTAGAAGCTTTG  
 AAAAGAAGGGTTGCCAACCAAGTGACATAGAGAATCCCAGAGGCTCCCAAATAAAAAGAATAAAAA  
 ACGTCACCAATCGCAGCAAAGGGATGGCAGAGAAGCTCCGGCCAGAAGACATTACTCAGATCCAACCACA  
 ACAGCTGCTTCTAAAGTTGCGATCAGGAGAACCACAGAAGTTTACATTAATAAAGAGGGCTGAAGAC  
 TACCCTATTGATCTGACTACCTTATGGATCTCTCCTACTCTATGAAAGATGATCTGGAGAATGTGAAGA  
 GTCTTGGGACGGATCTGATGAATGAAATGAGGAGGATTACTTCAGACTTCCGCATTGGCTTTGGCTCATT  
 TGTGGAGAAAACGTGATGCCATACATTAGTACAACACCAGCAAAGCTAAGAAATCCTTGTACGAGTGAA  
 CAAAACGTACCAGCCATTTAGCTACAAAACGTGCTTAGTCTTACTGACAGAGGAGAGTTTTCAATG  
 AACTTGTGGTGCAGCAGCGCATATCTGGAACTTGGACTCTCCAGAAGGTGGCTTTGATGCAATCATGCA  
 GGTTGCAGTTTGTGGTGCCTGATTGGCTGGAGGAATGTAACACGACTGCTGGTGTTCACCGGATGCT  
 GGGTTTCACTTTGCTGGAGATGGGAACTTGGTGGTATTGTTTTACCCAATGATGGCCAGTGCACCTGG  
 AAAATAATGTGTATACAATGAGCCATTACTATGATTATCCTTCAATTGCTCACCTTGTTCAGAACTAAG  
 TGAAAAAATATTCAGACGATTTTGCAGTCACTGAAGAGTTCAGCCTGTTTACAAGGAATTGAAGAAT  
 TTGATTCCTAAGTCAGCAGTGGGCACACTGTCTGGAACTCTAGTAATGTGATACAGCTGATTATCGATG  
 CCTACAATCCCTTTCTCAGAAGTCAATCTGGAAAACAGCAAATGCCAGATGGAGTAAACAATAATTA  
 CAAGTCTACTGCAAGAATGGAGTGAATGGGACAGGAGAAAATGGACGAAAGTGCCTAACATTTCCATT  
 GGAGATGAGGTTCAATTTGAAATTAGCATAACTGCTAATAAATGTCCAAACAAGGAGTCTGAAAACATTA  
 AAATTAACCTCTGGCTTCACAGAAGAAGTAGAGGTGGTCTTCAGTTCATCTGTAAGTGAATTGTCA  
 AAGCCATGGCATCCCAGCAAGTCCCAAGTCCCATGAGGGAAATGGGACATTTGAGTGTGGAGCCTGCAGG  
 TGCAATGAGGGTCTGTTGGGAGACACTGTGAATGTAGCACAGATGAAGTGAACAGTGAAGACATGGATG  
 CTTACTGCAGAAAAGAGAACAGCTCAGAGATCTGCAGTAAACAATGGAGAGTGTCTGTGGACAGTGTG  
 GTGCAGGAAGAGAGAGAATACAAATGAAATTTACTCCGGCAAATCTGCGAGTGTGATAACTTCAACTGC  
 GATAGGTTCAACGGCTTAATCTGTGGAGGAAATGGTGTGTCAGGTGTCGTGTCTGTGAATGCTATCCCA  
 ACTACACTGGCAGTGCATGTGACTGTTCCCTGGACACTGTTCCATGCGTAGCGACAAATGGTCAGATCTG  
 CAATGGCCGGGGCATCTGTGAATGTGGTCTTGTAAAGTGACAGATCCCAAGTTCCAAGGGCCAACCTGT  
 GAGACCTGTGACACTGCCTTGGTGTCTGTGCAGAGCATAAAGAATGTGTTCAAGTGCAGAGCCTTCAATA  
 AAGGAGAAAAAAGACACGTGTGCACAGGAGTGTCCCAATTTCAACCTCACTAAAGTGGAAAGCAGGGA  
 GAAGTTGGCCAGCCTGTGCAGTGGACCCTGTGACCCACTGCAAGGAGAAGGACATTGATGACTGCTGG  
 TTCTATTTACCTACTCAGTGAACAGCAACGGTGAAGCTCACGTGCATGTTGTGGAGACTCCAGACTGTC  
 CTACTGGTCCCGACATCATCCCAATGTAGCAGGCGTGGTTGCCGGAATGTTCTTATTGGCCTTGCTT  
 GCTGCTGATTTGAAAACTTTTAATGATAATTCATGACAGAAGGGAATTTGCTAAATTTGAAAAGGAGAAA  
 ATGAATGCCAAGTGGGACACGGGTGAAAATCCTATTTACAAGAGTGCCGTGACAACACTGTGGTCAATCCGA  
 AGTATGAGGGAAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR204350 representing NM\_017022  
Red=Cloning site Green=Tags(s)

MNLQLVFWIGLISLICSVFGQTDKNRCLKANAKSCGECIQAGPNCGWCTNTTFLQEGMPTSARCDLLEAL  
KKKGCQPSDIENPRGSQTIKKNKNVTNRSKGMAEKLRPEDITQIQPQQLLKLRSGEQKFTLKFRAED  
YPIDLYLMDLSYSMKDDLENVKSLGTDLMNEMRRITSDFRIGFGSFVEKTVMPYISTTPAKLRNPCTSE  
QNCTSPFSYKNVLSLTDRGEFFNELVGQQRISGNLDSPEGGFDAIMQVAVCGSLIGWRNVTRLLVFSTDA  
GFHFAGDGKLGGI VLPNDGQCHLENNVYTM SHYYDYP SIAHLVQKLENNIQTIFAVTEEFQPVYKELKN  
LIPKSAVGTLSGNSSNVIQLIIDAYNSLSSEVILENSKLPDGV TINYKSYCKNGVNGTGENGRKCSNISI  
GDEVQFEISITANKCPNKESETIKIKPLGFTEEVEVVLQFICKCNCQSHGIPASPKCHEGNGTFECGACR  
CNEGRVGRHCECSTDEVNSEMDAYCRKENSSEICSNNGECVCGQCVCRKRENTNEIYSGKFCECDNFNC  
DRSNGLICGGNGVCRVCECYPNYTGSACDCSLDTPVCVATNGQICNGRGI CECGACKCTDPKFQGP TC  
ETCQTCLGVCAEHKECVQCRAFNGEKKDTCAQEC SHFNLTKVESREKLPQPVQVDPVTHCKEKDIDDCW  
FYFTYSVNSNGEAHVHVETPDCPTGPDIIPIVAGVVAGIVLIGLALLLIWKLMI IHDRREFAKFEKEK  
MNAKWDGTGENPIYKSAVTTVVNPKYEGK

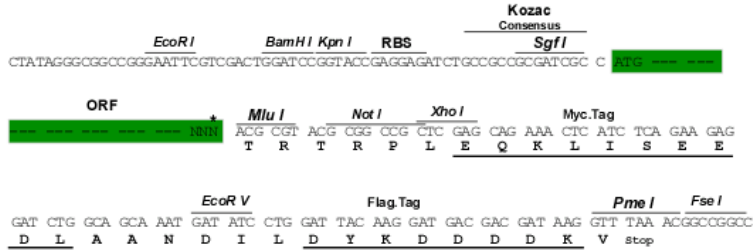
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/ja3818\\_a03.zip](https://cdn.origene.com/chromatograms/ja3818_a03.zip)

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM\_017022  
 ORF Size: 2394 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_017022.2](#), [NP\\_058718.2](#)

**RefSeq Size:** 3683 bp

**RefSeq ORF:** 2397 bp

**Locus ID:** 24511

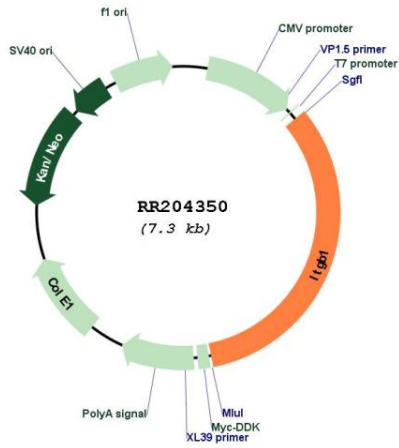
**UniProt ID:** [P49134](#)

**Cytogenetics:** 19q12

**MW:** 88.3 kDa

**Gene Summary:** beta subunit of integrin receptor which binds collagen [RGD, Feb 2006]

Product images:



Circular map for RR204350