

## Product datasheet for **RG211902**

### Integrin beta 1 (ITGB1) (NM\_033668) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin beta 1 (ITGB1) (NM_033668) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Integrin beta 1
Synonyms:	CD29; FNRB; GPIIA; MDF2; MSK12; VLA-BETA; VLAB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG211902 representing NM\_033668  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAATTTACAACCAATTTTCTGGATTGGACTGATCAGTTTCAGTTTGTCTGTGTTTGTCTCAAACAGATG  
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 GCAGTTGGTTTTGCGATTAAGATCAGGGGAGCCACAGACATTTACATTAATTAAGAGAGCTGAAGAC  
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 ACTGCTGATGGAAGCTTTTAAATGATAATTCATGACAGAAGGGAGTTTGCTAAATTTGAAAAGGAGAAA  
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 ACTACGGACGTAAGCTGGTCTC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG211902 representing NM\_033668  
 Red=Cloning site Green=Tags(s)

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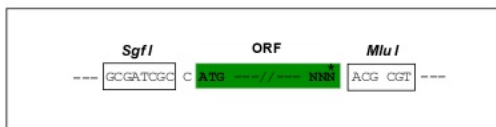
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MNAKWD TQENPIYKSPINNFKNPNYGRKAGL
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



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                                     Kozac
                                     Consensus
                                     Sgf I   Asc I
EcoR I   BamH I Kpn I   RBS
CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

Hind III   Nhe I   Rsr II   Mlu I   Not I   Xho I   GFP Tag
CAAGCTTAAGTACTAGCTAGCGGACCG   ACG CGT   ACG CGG   CCG   CTC GAG   ATG GAG AGC GAC ---
                                     T   R   T   R   P   L   E   M   E   S   D   -   -   -

                                     Pme I   Fse I
--- --- GAA GAA AGA GTT TAA ACGGCCGGCCCGGGAGCT
- - - E E R V Stop
    
```

**ACCN:** NM\_033668

**ORF Size:** 2403 bp

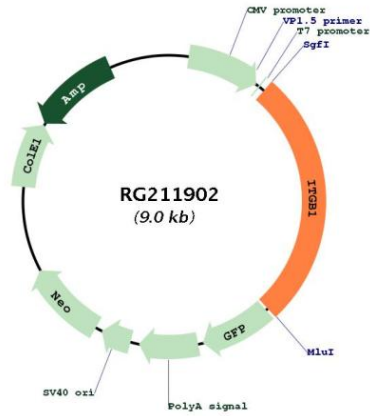
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_033668.1</a> , <a href="#">NP_391988.1</a>
<b>RefSeq Size:</b>	2481 bp
<b>RefSeq ORF:</b>	2406 bp
<b>Locus ID:</b>	3688
<b>UniProt ID:</b>	<a href="#">P05556</a>
<b>Cytogenetics:</b>	10p11.22
<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
<b>Protein Pathways:</b>	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Axon guidance, Cell adhesion molecules (CAMs), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Leukocyte transendothelial migration, Pathogenic Escherichia coli infection, Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung cancer
<b>Gene Summary:</b>	<p>Integrins are heterodimeric proteins made up of alpha and beta subunits. At least 18 alpha and 8 beta subunits have been described in mammals. Integrin family members are membrane receptors involved in cell adhesion and recognition in a variety of processes including embryogenesis, hemostasis, tissue repair, immune response and metastatic diffusion of tumor cells. This gene encodes a beta subunit. Multiple alternatively spliced transcript variants which encode different protein isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RG211902