

## Product datasheet for **RC220541**

### Integrin beta 4 (ITGB4) (NM\_000213) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin beta 4 (ITGB4) (NM_000213) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ITGB4
Synonyms:	CD104; GP150
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC220541 representing NM_000213 Red=Cloning site Blue=ORF Green=Tags(s)

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ATGGCAGGGCCACGCCCCAGCCCATGGGCCAGGCTGCTCCTGGCAGCCTTGATCAGCGTCAGCCTCTCTG  
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GCCGTGGGGAGTGCCAGTGCGGGCACTGTGTGTGCTACGGCGAAGGCCGCTACGAGGGTCAGTTCTGCGA  
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**Protein Sequence:**

>RC220541 representing NM\_000213  
 Red=Cloning site Green=Tags(s)

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 PT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4867\\_h05.zip](https://cdn.origene.com/chromatograms/mg4867_h05.zip)

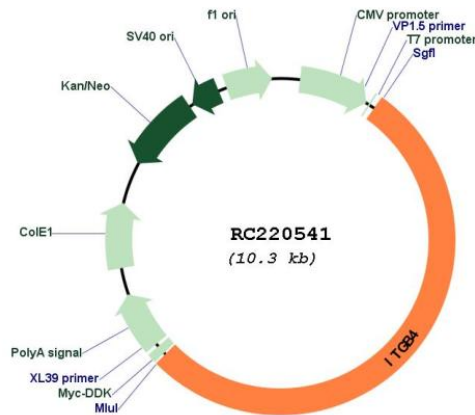
**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**



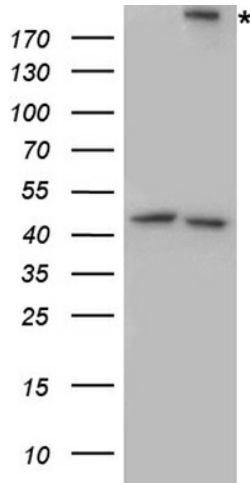
**Plasmid Map:**



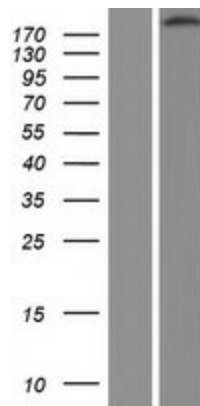
ACCN: NM\_000213  
 ORF Size: 5466 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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_000213.5</a>
<b>RefSeq Size:</b>	5925 bp
<b>RefSeq ORF:</b>	5469 bp
<b>Locus ID:</b>	3691
<b>UniProt ID:</b>	<a href="#">P16144</a>
<b>Cytogenetics:</b>	17q25.1
<b>Domains:</b>	INB, Calx-beta, PSI, FN3, EGF
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Regulation of actin cytoskeleton
<b>MW:</b>	202.12 kDa
<b>Gene Summary:</b>	Integrins are heterodimers comprised of alpha and beta subunits, that are noncovalently associated transmembrane glycoprotein receptors. Different combinations of alpha and beta polypeptides form complexes that vary in their ligand-binding specificities. Integrins mediate cell-matrix or cell-cell adhesion, and transduced signals that regulate gene expression and cell growth. This gene encodes the integrin beta 4 subunit, a receptor for the laminins. This subunit tends to associate with alpha 6 subunit and is likely to play a pivotal role in the biology of invasive carcinoma. Mutations in this gene are associated with epidermolysis bullosa with pyloric atresia. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

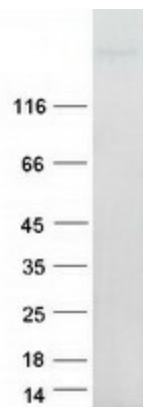
**Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ITGB4 (Cat# RC220541, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ITGB4 antibody (Cat# [TA890131]). Positive lysates [LY423633] (100ug) and [LC423633] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424862]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220541 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ITGB4 protein (Cat# [TP320541]). The protein was produced from HEK293T cells transfected with ITGB4 cDNA clone (Cat# RC220541) using MegaTran 2.0 (Cat# [TT210002]).