

Product datasheet for RC221990

Integrin alpha 6 (ITGA6) (NM_000210) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin alpha 6 (ITGA6) (NM_000210) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ITGA6
Synonyms:	CD49f; ITGA6B; VLA-6
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC221990 representing NM_000210 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC221990 representing NM_000210
 Red=Cloning site Green=Tags(s)

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Chromatograms:

https://cdn.origene.com/chromatograms/mk6169_d11.zip

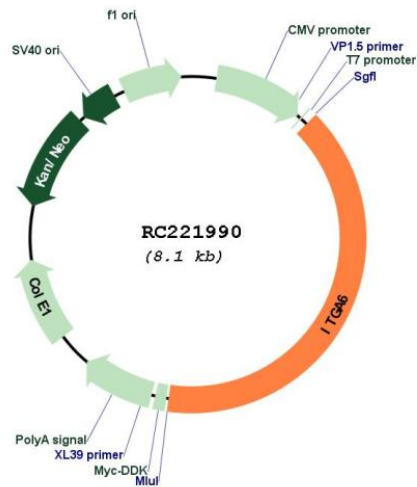
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_000210

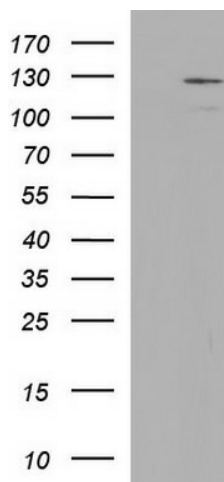
ORF Size: 3219 bp

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](#)

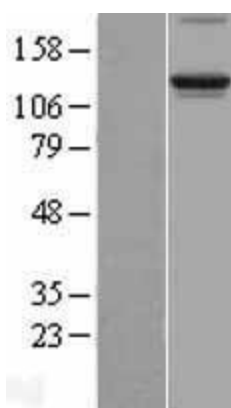
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_000210.4</u>
RefSeq Size:	5611 bp
RefSeq ORF:	3222 bp
Locus ID:	3655
UniProt ID:	<u>P23229</u>
Cytogenetics:	2q31.1
Domains:	FG-GAP
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cell adhesion molecules (CAMs), 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:	119.48 kDa
Gene Summary:	The gene encodes a member of the integrin alpha chain family of proteins. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain that function in cell surface adhesion and signaling. The encoded preproprotein is proteolytically processed to generate light and heavy chains that comprise the alpha 6 subunit. This subunit may associate with a beta 1 or beta 4 subunit to form an integrin that interacts with extracellular matrix proteins including members of the laminin family. The alpha 6 beta 4 integrin may promote tumorigenesis, while the alpha 6 beta 1 integrin may negatively regulate erbB2/HER2 signaling. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2015]

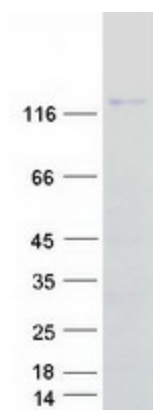
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ITGA6 (Cat# RC221990, 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-ITGA6(Cat# [TA590012]). Positive lysates [LY400075] (100ug) and [LC400075] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400075]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221990 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ITGA6 protein (Cat# [TP321990]). The protein was produced from HEK293T cells transfected with ITGA6 cDNA clone (Cat# RC221990) using MegaTran 2.0 (Cat# [TT210002]).