

Product datasheet for **RC206296**

ITGA7 (NM_002206) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITGA7 (NM_002206) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ITGA7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206296 representing NM_002206 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGCCGGGGCTCGGAGCCGCGACCCCTGGGGGGCCTCCGGGATTTGCTACCTTTTTGGCTCCCTGCTCG
TCGAACTGCTCTTCTCACGGGCTGTGCGCTTCAATCTGGACGTGATGGGTGCCTTGCGCAAGGAGGGCGA
GCCAGGCAGCCTCTTCGGCTTCTCTGTGGCCCTGCACCGGCAGTTGCAGCCAGACCCAGAGCTGGCTG
CTGGTGGTGCTCCCCAGGCCCTGGCTCTTCTGGGCAGCAGGCGAATCGCACTGGAGGCCCTCTTCGTT
GCCCATTTAGCCTGGAGGAGACTGACTGTACAGAGTGGACATCGACAGGGAGCTGATGCAAAAAGGA
AAGCAAGGAGAACCAGTGGTTGGGAGTCAAGTGTTCGGAGCCAGGGCCTGGGGGCAAGATTGTTACCTGT
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GGGCCAGGTTCCCATGTGACGTTCTGAGCCGTAACCTGGAAGAACCAAGCACCAGGCCCTCGGGCACC
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Protein Sequence:

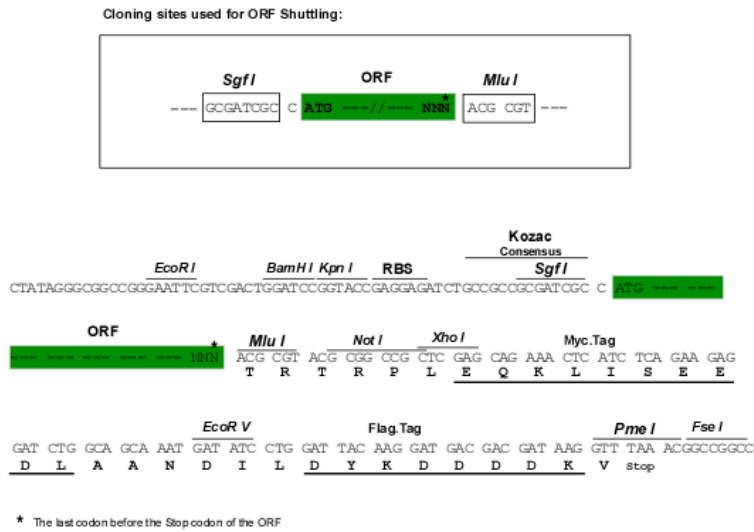
>RC206296 representing NM_002206
 Red=Cloning site Green=Tags(s)

MAGARSRDPWAGSGICYLFGSLLVELLFSRAVAFNLDVMGALRKEGEPGSLFGFSVALHRQLQPRPQSWL
 LVGAPQALALPGQQANRTGGLFACPLSLEETDCYRVDIDQGADMQKESKENQWLGVSVRSQGGPKIVTC
 AHRYEARQRVDQILETRDMIGRCFVLSQDLAIRDELGGGEWKFCEGRPQGHEQFGCQQGTAAPSPDSH
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 VWLKHQHDRVCGDAMFQLQENVKDKLRAIVVTLSYSLQTPRLRRQAPGQGLPPVAPILNAHQSTQRAEI
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 PQADGDDAHEAQLLVMPLDSLHYSVGRALDPAEKPLCLSNENASHVECELGNPMPKRGAVTFYLLSTSG
 ISIETTELEVELELLATISEQELHPVSARARVFIELPLSIAGMAIPQQLFFSGVVRGERAMQSERDVGSKV
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 NSTFLEEYSAVKSLEVIVRANITVKSSIKNMLRDASTVIPVMVYLDPMVAEVPWWVILLAVLAGLL
 VLALLVLLLWKMGGFKRAKHPEATVPQYHAVKIPREDRQQFKEEKTGTILRNNWGSPPREGPDAHPILAA
 DGHPELGPDPGHPGPTA

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002206

ORF Size: 3411 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 or by calling 301.340.3188 option 3 for pricing and delivery.

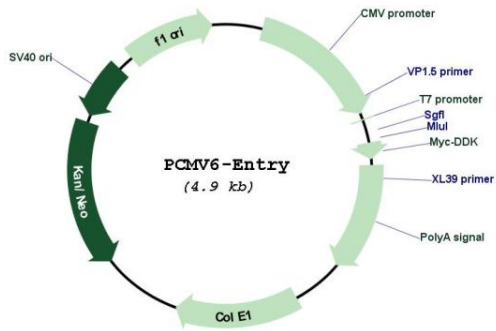
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<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:	NM_002206.3
RefSeq Size:	4138 bp
RefSeq ORF:	3414 bp
Locus ID:	3679
UniProt ID:	Q13683
Cytogenetics:	12q13.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Regulation of actin cytoskeleton
MW:	124.3 kDa
Gene Summary:	<p>The protein encoded by this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. They mediate a wide spectrum of cell-cell and cell-matrix interactions, and thus play a role in cell migration, morphologic development, differentiation, and metastasis. This protein functions as a receptor for the basement membrane protein laminin-1. It is mainly expressed in skeletal and cardiac muscles and may be involved in differentiation and migration processes during myogenesis. Defects in this gene are associated with congenital myopathy. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Feb 2009]</p>

Product images:



Circular map for RC206296