

Product datasheet for **SC303148**

ITGA7 (NM_002206) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITGA7 (NM_002206) Human Untagged Clone
Tag:	Tag Free
Symbol:	ITGA7
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC303148 sequence for NM_002206 edited (data generated by NextGen Sequencing)

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ATGGCCGGGGCTCGGAGCCGCGACCCTTGGGGGGCCTCCGGGATTTGCTACCTTTTTGGCTCCCTGCTCG
TCGAACTGCTCTTCTCACGGGCTGTGCGCTTCAATCTGGACGTGATGGGTGCCTTGC GCAAGGAGGGCGA
GCCAGGCAGCCTCTTCGGCTTCTGTGGCCCTGCACCGGCAGTTGCAGCCCAGACCCCAGAGCTGGCTG
CTGGTGGGTGCTCCCCAGGCCCTGGCTCTTCTGGGCAGCAGGCGAATCGCACTGGAGGCCCTTTCGCTT
GCCCATTGAGCCTGGAGGAGACTGACTGCTACAGAGTGGACATCGACCAGGGAGCTGATATGCAAAAGGA
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TTGTGCTCAGCCAGGACCTGGCCATCCGGGATGAGTTGGATGGTGGGGAATGGAAGTTCTGTGAGGGACG
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TACCTCTCTTTGGGGCCCCAGGAACCTATAATTGGAAGGGTTGCTTTTTGTGACCAACATTGATAGCT
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GGGCCAGGTTCCCATGTGACGTTCTGAGCCGTAACCTGGAAGAACCACCAAGCACCAGGCCCTCGGGCACC
GTGTGGCTGAAGCACCAGCATGACCGAGTCTGTGGAGACGCCATGTTCCAGCTCCAGGAAATGTCAAAG

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ACAAGCTTCGGGCCATTGTAGTGACCTGTCTACAGTCTCCAGACCCCTCGGCTCCGGCGACAGGCTCC
TGGCCAGGGGCTGCCTCCAGTGGCCCCATCCTCAATGCCACCAGCCCAGCACCCAGCGGGCAGAGATC
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CCCCATGGCTGTGGTGGCAGAAGGAGTGCCTGGTGGGTCATCCTCCTGGCTGTACTGGCTGGGCTGCTG
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CCGTGCCCCAGTACCATGCGGTGAAGATTCTCGGGATGACCCACAGCAGTTCAAGGAGGAGAAGACGGG
CACCATCTGAGGAACAAGTGGGGCAGCCCCGGCGGGAGGGCCCGGATGCACACCCCATCTGGCTGCT
GACGGGCATCCCAGCTGGGCCCGATGGGCATCCAGGGCCAGGCACCGCTAG
    
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Clone variation with respect to NM_002206.2

193:a=>c 285:a=>g 427:a=>c 720:t=>g 1237:g=>a 1384:a=>c 1625:a=>g 1952:a=>g 1955:t=>c
2001:a=>c 2906:a=>g 3258:t=>a

Restriction Sites:

Please inquire

ACCN:

NM_002206

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:

The open reading frame of this TrueClone was fully sequenced and found to differ from the protein associated to this reference by 5 amino acids.

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_002206.1</u> , <u>NP_002197.1</u>
RefSeq Size:	4138 bp
RefSeq ORF:	3414 bp
Locus ID:	3679
UniProt ID:	<u>Q13683</u>
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
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> <p>Transcript Variant: This variant (2) contains an alternate in-frame coding exon compared to transcript variant 1. This results in a slightly shorter isoform (2) with a different internal protein segment compared to isoform 1.</p>