

Product datasheet for **SC337809**

ITGA8 (NM_001291494) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITGA8 (NM_001291494) Human Untagged Clone
Tag:	Tag Free
Symbol:	ITGA8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001291494, the custom clone sequence may differ by one or more nucleotides

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ATGTCGCCCGGGGCCAGCCGCGGTCCCGGGGAAGCCAGGCGCCGCTGATCGCGCCCTCTGCTGCGCCG
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CAGACCTCCTCAGGAGGACATGACCCAGAGGAACAGCTGACAAATGACAAGACCCTGAGGCATGA
    
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Restriction Sites: SgfI-MluI

ACCN:	NM_001291494
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_001291494.1</u> , <u>NP_001278423.1</u>
RefSeq Size:	6937 bp
RefSeq ORF:	3147 bp
Locus ID:	8516
Cytogenetics:	10p13
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cell adhesion molecules (CAMs), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Regulation of actin cytoskeleton

Gene Summary:

Integrins are heterodimeric transmembrane receptor proteins that mediate numerous cellular processes including cell adhesion, cytoskeletal rearrangement, and activation of cell signaling pathways. Integrins are composed of alpha and beta subunits. This gene encodes the alpha 8 subunit of the heterodimeric integrin alpha8beta1 protein. The encoded protein is a single-pass type 1 membrane protein that contains multiple FG-GAP repeats. This repeat is predicted to fold into a beta propeller structure. This gene regulates the recruitment of mesenchymal cells into epithelial structures, mediates cell-cell interactions, and regulates neurite outgrowth of sensory and motor neurons. The integrin alpha8beta1 protein thus plays an important role in wound-healing and organogenesis. Mutations in this gene have been associated with renal hypodysplasia/aplasia-1 (RHDA1) and with several animal models of chronic kidney disease. Alternate splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Apr 2014]

Transcript Variant: This variant (2) lacks an in-frame exon in the 5' coding region, compared to variant 1. It encodes a shorter protein (isoform 2), compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.