

## Product datasheet for **SC107298**

### Integrin alpha 1 (ITGA1) (NM\_181501) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin alpha 1 (ITGA1) (NM_181501) Human Untagged Clone
Tag:	Tag Free
Symbol:	Integrin alpha 1
Synonyms:	CD49a; VLA1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC107298 sequence for NM_181501 edited (data generated by NextGen Sequencing)

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ATGGCCCCTCGGCCCGCCCGCCCGCCAGGGGTCGCTGTCGCCTGCTGCTGCTCCTCACT
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Clone variation with respect to NM\_181501.1

3522 a=>r

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_181501 unedited</p> <pre>GGGCGCTCGTAGGNAATTATGANAACACGNATTTCACTATAGNNGCGGCCGCGNAATTC GGCAGCAGGGCAGCGGGATAAGTGGCCAGCCAGAGAGCGCAGCTCCCGCGCCCGGTCT GCCCTGCGAACACGCGCGGCCCTGGCGCTGAGGCTGCTCCGGCCATGGCCCCTCGGCC CCGCGCCCGCCAGGGGTGCTGCGCTGCTGGCTCCTCACTGTTGTTCTACGCTG CTGCGTATCATTCAATGTTGATGTGAAAAATTCAATGACTTTCAGCGGCCCGGTGGAAGA CATGTTGGATATACTGTTCAACAATATGAAAAATGAAGAAGGAAAAATGGGTGCTTATTGG TTCCTCCGTTAGTTGGCCAACCCAAAAACAGAAGTGGAGATGTCTATAAGTGCCAGTTGG GAGAGGTGAATCATTACCTTGTGTAAGTTGGATCTACCAGTTAATACATCAATCCCAA TGTACAGAAGTAAAGGAGAACATGACATTTGGATCAACTTTAGTCACCAACCCAAATGG AGGATTTCTGGCTTGTGGGCCCTTATATGCCTATAGATGTGGACATTTGCATTACACAAC TGGAACTGTTCTGACGTCAGCCCCACATTTCAAGTCGTGAATTCATTGCCCTGTACA AGAATGCAGCACTCACTGGACATAGTCATAGTCTGGATGGTTCCAACAGTATTTACCC ATGGGACAGTGTACAGCTTNTTAAATGACCTTCTTGAAGATGGATATTGGTCCTAAA CAGACACAGGTTGGAATTGTACAGTATGGAGAAAACGTGACCCATGAGTNCAACCTCAAT AAGTATCCTTCCACCGAAGGACTACTCGTTGCAGCAAAGAAATAGTCCAGAGAGTGCCCGC CAGATATGACAGCTCT</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_181501 unedited</p> <pre>CATTGGNGATGGCACTTCCAGNCCAGNANGAGCCTGGGNGAGGGTCACAGGGATGCC ACCCGGGATCTGTTCCAGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTT TTTTTTTTTTTTAGATTATTGAATAATTGTTATTTTCTTTTCATAAAATATTTCAATTT CTCCATTTTCTTTCAGTGGTCTTTTGAAGAATCCAATCTTCCACAGTGCTAAAATGAG CAGCATTAAACAGCAACAATCCGGCAAAAGCACTCAGCAGGATGACCCATAATGGCACTCT GCCCGTAGCCCATCTTTGGATATTTGAATAGCAAAGCTCTTTTTTTGATTGCTGCTACT TAAACACAGAGATGCATTTTCACTCCGAAGTCTCCCTTATAGTAAGATTTAAGCTGGA AAAATATGATTTTATAAAAAGTTGGTTTCCACAAGATAAGCGAAACATTGACTTGGCTGAT GTCAGAAGAAGTGAGATTACATGTGATGGTAGCAAATTTACATGTATTGCAGTCCAGAAT TGTGCCTCGTTTGAAGTGGTCAGTTGATGTAGTCAATTTCTTTCCAGAGTTGATACTGAA AGGATCCTCANAGATATGGGGTCTGCAGTTTGCATTCTCAGAAGATGACAATCCAGTTGG GTACAGCACAGGGTAACCATTTGATGTCATATTGGGGAATGAAATTGACAGCTTAAGCTC TGGCATTGAAAAGATCCACTTTTTCTATCAAGTAGAAGATATAATTTCAATTTCCAAATGT CCTCCATAGATTAATAACTTCAGGACTGTCTCATTGGCAGCCATTGAAATGTGGTATTCA CTTGCAGAGCTGGTAAACTGTAGTTCAACTTCATATTTTACCGGAATAAAAATGTTACTA CCTTATCAGAAAGTTTTTCAGGAGTN</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_181501
<b>Insert Size:</b>	3900 bp
<b>OTI Disclaimer:</b>	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).
<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_181501.1</a> , <a href="#">NP_852478.1</a>
<b>RefSeq Size:</b>	4811 bp
<b>RefSeq ORF:</b>	3540 bp
<b>Locus ID:</b>	3672
<b>UniProt ID:</b>	<a href="#">P56199</a>
<b>Cytogenetics:</b>	5q11.2
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hematopoietic cell lineage, Hypertrophic cardiomyopathy (HCM), Regulation of actin cytoskeleton
<b>Gene Summary:</b>	This gene encodes the alpha 1 subunit of integrin receptors. This protein heterodimerizes with the beta 1 subunit to form a cell-surface receptor for collagen and laminin. The heterodimeric receptor is involved in cell-cell adhesion and may play a role in inflammation and fibrosis. The alpha 1 subunit contains an inserted (I) von Willebrand factor type I domain which is thought to be involved in collagen binding. [provided by RefSeq, Jul 2008]