

Product datasheet for **SC326313**

CD51 (ITGAV) (NM_001145000) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: CD51 (ITGAV) (NM_001145000) Human Untagged Clone
Tag: Tag Free
Symbol: ITGAV
Synonyms: CD51; MSK8; VNRA; VTNR
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_001145000, the custom clone sequence may differ by one or more nucleotides

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ATGGCTTTTCCGCCGCGGCGACGGCTGCGCCTCGGTCCCCGCGGCTCCCGCTTCTTCTC
TCGGGACTCCTGTACTCTGTGCCGCGCTTCAACCTAGACGTGGACAGTCCTGCCGAG
TACTCTGGCCCCGAGGGAAGTTACTTCGGCTTCGCCGTGGATTTCTTCGTGCCAGCGCG
TCTTCCCGGATGTTTCTTCGTGGGAGCTCCCAAAGCAAACACCACCCAGCCTGGGATT
GTGGAAGGAGGGCAGGTCTCAATGTGACTGGTCTTCTACCCGCCGGTGCCAGCCAATT
GAATTTGATGCAACAGGCAATAGAGATTATGCCAAGGATGATCCATTGGAATTTAAGTCC
CATCAGTGGTTTGGAGCATCTGTGAGGTGAAAACAGGATAAAAATTTGGCCTGTGCCCA
TTGTACCATTGGAGAAGTGGAGATGAAACAGGAGCGAGAGCCTGTTGGAACATGCTTCTT
CAAGATGGAACAAAGACTGTTGAGTATGCTCCATGTAGATCACGTGAGCTTATTTCCGGAT
CAAGTGGCAGAAAATCGTATCTAAATACGACCCCAATGTTTACAGCATCAAGTATAATAAC
CAATTAGCAACTCGGACTGCACAAGCTATTTTTGATGACAGCTATTTGGGTTATTCTGTG
GCTGTCGGAGATTTCAATGGTGATGGCATAGATGACTTTGTTTCAGGAGTTCCAAGAGCA
GCAAGGACTTTGGGAATGGTTTATTTTATGATGGGAAGAACATGTCCTCCTTATACAAT
TTTACTGGCGAGCAGATGGCTGCATATTTCCGATTTTCTGTAGCTGCCACTGACATTAAT
GGAGATGATTATGCAGATGTGTTTATTGGAGCACCTCTTTCATGGATCGTGGCTCTGAT
GGCAAACCTCAAGAGGTGGGGCAGGTCTCAGTGTCTCTACAGAGAGCTTCAGGAGACTTC
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TTGGGAGATCTGGACCAGGATGGTTTCAATGATATTGCAATTGCTGCTCCATATGGGGGT
GAAGATAAAAAAGGAATTGTTTATCTTCAATGGAAGATCAACAGGCTTGAACGCGAGTC
CCATCTCAAATCCTTGAAGGGCAGTGGGCTGCTCGAAGCATGCCACCAAGCTTTGGCTAT
TCAATGAAAGGAGCCACAGATATAGACAAAAATGGATATCCAGACTTAATTGTAGGAGCT
TTTGGTGTAGATCGAGCTATCTTATACAGGGCCAGACCAGTTATCACTGTAATGCTGGT
CTTGAAGTGTACCCTAGCATTTTAAATCAAGACAATAAAACCTGCTCACTGCCTGGAACA
GCTCTCAAAGTTTCTGTTTTAATGTTAGGTTCTGCTTAAAGGCAGATGGCAAAGGAGTA
CTTCCCAGGAACTTAATTTCCAGGTGGAACCTCTTTTGGATAAACTCAAGCAAAAAGGGA
GCAATTCGACGAGCACTGTTTCTTACAGCAGGTCCCCAAGTCACTCCAAGAACATGACT
ATTTCAAGGGGGGACTGATGCAGTGTGAGGAATTGATAGCGTATCTGCGGGATGAATCT
GAATTTAGAGACAAACTCACTCCAATTAATTTTTATGGAATATCGGTTGGATTATAGA
ACAGCTGCTGATACAACAGGCTTGCAACCCATTCTTAACCAAGTTCACGCCTGCTAACATT

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AGTCGACAGGCTCACATTCTACTTGACTGTGGTGAAGACAATGTCTGTAACCCAAGCTG
GAAGTTTCTGTAGATAGTGATCAAAAAGAAGATCTATATTGGGGATGACAACCTCTGACA
TTGATTGTTAAGGCTCAGAATCAAGGAGAAGGTGCCTACGAAGCTGAGCTCATCGTTTCC
ATTCCACTGCAGGCTGATTTTCATCGGGGTTGTCCGAAACAATGAAGCCTTAGCAAGACTT
TCCTGTGCATTTAAGACAGAAAACCAAACTCGCCAGGTGGTATGTGACCTTGAAACCCA
ATGAAGGCTGGAACCTCAACTCTTAGCTGGTCTTCGTTTCAGTGTGCACCAGCAGTCAGAG
ATGGATACTTCTGTGAAATTTGACTTACAAATCCAAAGCTCAAATCTATTTGACAAAGTA
AGCCCAGTTGTATCTCACAAAGTTGATCTTGCTGTTTTAGCTGCAGTTGAGATAAGAGGA
GTCTCGAGTCTGATCATATCTTTCTTCCGATTCCAAACTGGGAGCACAAGGAGAACCCT
GAGACTGAAGAAGATGTTGGGCCAGTTGTTTCAGCACATCTATGAGCTGAGAAAACAATGGT
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ACTCTGTTGTATATCCTTCATTATGATATTGATGGACCAATGAACTGCACTTCAGATATG
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GTTGCCGGCAAGGTGAGCGGGACCATCTCATCTAAGCGGGATCTTGCCTCAGTGAA
GGAGATATTCACACTTTGGGTTGTGGAGTTGCTCAGTGTGAAGATTGTCTGCCAAGTT
GGGAGATTAGACAGAGGAAAGAGTGCAATCTTGTACGTAAGTCACTACTGTGGACTGAG
ACTTTTATGAATAAAGAAAATCAGAATCATTCTATTCTCTGAAGTCGTCTGCTTCATTT
AATGTCATAGAGTTTCTTATAAGAATCTTCCAATTGAGGATATCACCACTCCACATTG
GTTACCACTAATGTCACCTGGGGCATTACGCCAGCGCCATGCCTGTGCCTGTGTGGGTG
ATCATTTTAGCAGTTCTAGCAGGATTGTTGCTACTGGCTGTTTTGGTATTTGTAATGTAC
AGGATGGGCTTTTTTAAACGGGTCGGCCACCTCAAGAAGAACAAGAAAGGGAGCAGCTT
CAACCTCATGAAAATGGTGAAGGAACTCAGAACT

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- Restriction Sites:** Please inquire
- ACCN:** NM_001145000
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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:**
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_001145000.1](#), [NP_001138472.1](#)
- RefSeq Size:** 6939 bp
- RefSeq ORF:** 3039 bp
- Locus ID:** 3685

UniProt ID:	<u>P06756</u>
Cytogenetics:	2q32.1
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, Hypertrophic cardiomyopathy (HCM), Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung cancer
Gene Summary:	<p>The product of this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha subunit and a beta subunit that function in cell surface adhesion and signaling. The encoded preproprotein is proteolytically processed to generate light and heavy chains that comprise the alpha V subunit. This subunit associates with beta 1, beta 3, beta 5, beta 6 and beta 8 subunits. The heterodimer consisting of alpha V and beta 3 subunits is also known as the vitronectin receptor. This integrin may regulate angiogenesis and cancer progression. Alternative splicing results in multiple transcript variants. Note that the integrin alpha 5 and integrin alpha V subunits are encoded by distinct genes. [provided by RefSeq, Oct 2015]</p> <p>Transcript Variant: This variant (3) lacks two alternate in-frame exons in the coding region compared to variant 1. This results in a shorter protein (isoform 3) compared to isoform 1. It is not known whether this isoform (3) is proteolytically processed in the same manner as isoform 1.</p>