

Product datasheet for **RC227617**

CD51 (ITGAV) (NM_001145000) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD51 (ITGAV) (NM_001145000) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ITGAV
Synonyms:	CD51; MSK8; VNRA; VTNR
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC227617 representing NM_001145000 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCTTTTCGCGCGGGCGACGGCTGCGCCTCGGTCCCCGCGGCTCCCGCTTCTCTCTCGGGACTCC
TGCTACCTCTGTGCCGCGCTTCAACCTAGACGTGGACAGTCCTGCCGAGTACTTGGCCCCGAGGAAG
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CCCAAAGCAAACACCACCCAGCCTGGGATTGTGGAAGGAGGGCAGGTCTCAAATGTGACTGGTCTTCTA
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GTCACTCCAAGAACATGACTATTTCAAGGGGGGACTGATGCAGTGTGAGGAATTGATAGCGTATCTGCC
 GGATGAATCTGAATTTAGAGACAACTCACTCCAATTACTATTTTATGGAATATCGGTTGGATTATAGA
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 AAAATGGTGAAGGAACTCAGAACT

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGTTTAA

Protein Sequence:

>RC227617 representing NM_001145000
Red=Cloning site Green=Tags(s)

MAFPPRRRLRLGPRGLPLLLSGLLLPLCRANLVDVSPAIEYSGPEGSYFGFVDFVPSASSRMFLLVGA
 PKANTTQPGIVEGGQVLKCDWSSTRRCQPIEFDATGNRDYAKDDPLEFKSHQWFASVRSKQDKILACAP
 LYHWRTEMKQEREPVGTGFLQDGTKEVYAPCRSRQLISDQVAEIVSKYDPNVYSIKYNNQLATRTAQAI
 FDDSYLGYSAVGFNGDGIDDFVSGVPRAARTLGMVYIYDGKMNSSLYNFTGEQMAAYFGSVAATDIN
 GDDYADVFIGAPLFMDRGS DGKLQEVGQVSVSLQRASGDFQTTKLNFEV FARFGSAIAPLDLDQDGFN
 DIAIAAPYGGEDKKGIVYIFNGRSTGLNAVPSQILEGQWAARSMPSPFGYSMKGATDIDKNGYDILVGA
 FGVDRAILYRARPVITVNAGLEVYPSILNQDNKCSLPGTALKVSCFNVRFLKADGKGVLPKLNQVE
 LLLDKLKQKGAIRRALFLYSRSPSHSKNMTISRGLMQCEELIAYLRDESEFRDKLTPITIFMEYRLDYR
 TAADTTGLQPIILNQFTPANISRQAHILLDCGEDNVCKPKLEVSVDSDQKKIYIGDDNPLTLIVKAQNGE
 GAYEAELIVSIPLQADF IGVVRNNEALARLSCAFKTENQTRQVVDLGNPMKAGTQLLAGLRF SVHQQSE
 MDTSVKFDLQIQSSNLFDKVSPVYSHKVDLAVLA AVEIRGVSSPDHIFLPIPNWEHKENPETEEDVGPVV
 QHIYELRNNGPSSFSKAMLHLQWPYKYNNTLLYILHYDIDGPMNCTSDMEINPLRIKISSLQTTEKNDT
 VAGQGERDHLITKRDLALSEGDIHTLGCQVQCLKIVCQVGRDRGKSAI LYVKSLLWTETF MNKENQNH
 SYSLKSSASFNVIEFPYKNLPIEDITNSTLVTTNVTWGIQPAPMPVVPVWV IILAVLAGLLLLAVLVFVVMY
 RMGFFKRVRPPQEEQEREQLQPHENGE GNSSET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

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_001145000.2
RefSeq ORF:	3039 bp
Locus ID:	3685
UniProt ID:	P06756
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
MW:	112.1 kDa
Gene Summary:	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]