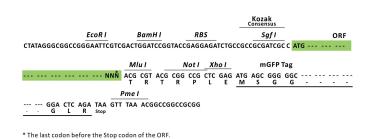


# Product datasheet for RC218837L2

## CD51 (ITGAV) (NM\_002210) Human Tagged Lenti ORF Clone

### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CD51 (ITGAV) (NM_002210) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	CD51
Synonyms:	CD51; MSK8; VNRA; VTNR
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC218837).
<b>Restriction Sites:</b>	Sgfl-Mlul
Cloning Scheme:	
	Cloning sites used for ORF Shuttling:
	Sgf I ORF Mlu I GCG ATC GCC ATG // NNŇ ACG CGT



ACCN: ORF Size: NM\_002210 3144 bp

View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

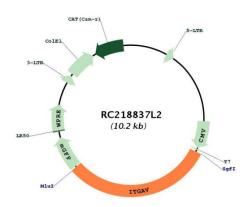
#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

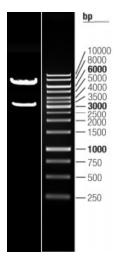
reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u> 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: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 dato 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 add 100ul of sterile water to dissolve the DNA. 3. Close 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 add 100ul of sterile water to dissolve the DNA. 3. Score the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C. 3. The DNA is stable for at least one year from date of shipping when stored at -20°C. 3. The DNA is stable for at least one year from date of shipping when stored at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C. 3. The DNA is stable for at least one year from date of shipping when stored at -20°C. 3. The DNA is stable for at least one year from date of shipping when	OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of
<ul> <li>varies depending on the nature of the gene.</li> <li>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).</li> <li>Reconstitution Method:</li> <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> <li>RefSeq Size:</li> <li>7037 bp</li> <li>RefSeq Size:</li> <li>7037 bp</li> <li>RefSeq ORF:</li> <li>3147 bp</li> <li>3685</li> <li>JniProt ID:</li> <li>P06756</li> <li>Cytogenetics:</li> <li>2q32.1</li> <li>Domains:</li> <li>FG-GAP</li> <li>Protein Families:</li> <li>Druggable Genome, ES Cell Differentiation/IPS, Transmembrane</li> <li>Protein Families:</li> <li>Druggable Genome, ES Cell Differentiation/IPS, Transmembrane</li> <li>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</li> <li>MW:</li> <li>115.9 kDa</li> <li>Sene Summary:</li> <li>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</li></ul>		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
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 002210.3RefSeq Size:7037 bpRefSeq ORF:3147 bpLocus ID:966756Cytogenetics:2q32.1Domains:FG-GAPProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein Pathways:Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cell adhesion molecules (CAMS), 	OTI Annotation:	
<ul> <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> <li>RefSeq: NM 002210.3</li> <li>RefSeq ORF: 3147 bp</li> <li>Locus ID: 3685</li> <li>UniProt ID: P06756</li> <li>Cytogenetics: 2q32.1</li> <li>Domains: FG-GAP</li> <li>Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane</li> <li>Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane</li> <li>Protein Families: Network, ECM-receptor interaction, Focal adhesion molecules (CAMs), Dilated cardiomyopathy, ICM-receptor interaction, Focal adhesion, Small cell lung cancer</li> <li>MW: 115.9 kDa</li> <li>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. 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. Sa buonits 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</li> </ul>	Components:	
RefSeq Size:7037 bpRefSeq ORF:3147 bpLocus ID:3685UniProt ID:P06756Cytogenetics:2q32.1Domains:FG-GAPProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein 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 cancerMW:115.9 kDaGene 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 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	Reconstitution Method:	<ol> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of</li> </ol>
RefSeq ORF:3147 bpLocus ID:3685UniProt ID:P06756Cytogenetics:2q32.1Domains:FG-GAPProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein 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 cancerMW:115.9 kDaGene 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	RefSeq:	<u>NM 002210.3</u>
Journel D:3685JniProt ID:P06756Cytogenetics:2q32.1Domains:FG-GAPProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein 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 cancerVW:115.9 kDaGene 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	RefSeq Size:	7037 bp
JniProt ID:P06756Cytogenetics:2q32.1Domains:FG-GAPProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein 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 cancerVW:115.9 kDaGene 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	RefSeq ORF:	3147 bp
Cytogenetics:2q32.1Domains:FG-GAPProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein 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 cancerVW:115.9 kDaGene 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	ocus ID:	3685
Domains:FG-GAPProtein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein 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 cancerVW:115.9 kDaGene 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	JniProt ID:	<u>P06756</u>
Protein Families:Druggable Genome, ES Cell Differentiation/IPS, TransmembraneProtein 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 cancerMW:115.9 kDaGene 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	Cytogenetics:	2q32.1
<ul> <li>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</li> <li>MW: 115.9 kDa</li> <li>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</li> </ul>	Domains:	FG-GAP
<ul> <li>Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung cancer</li> <li>MW: 115.9 kDa</li> <li>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</li> </ul>	Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
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	Protein Pathways:	Dilated cardiomyopathy, ECM-receptor interaction, Focal adhesion, Hypertrophic cardiomyopathy (HCM), Pathways in cancer, Regulation of actin cytoskeleton, Small cell lung
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	MW:	115.9 kDa
	Gene Summary:	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

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US 

# **Product images:**



Circular map for RC218837L2



Double digestion of RC218837L2 using Sgfl and Mlul

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US