

Product datasheet for RC218815

Integrin alpha 9 (ITGA9) (NM_002207) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Integrin alpha 9 (ITGA9) (NM_002207) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Integrin alpha 9
Synonyms:	ALPHA-RLC; ITGA4L; RLC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218815 representing NM_002207 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGGCCGGCTGCGCCGAGGGGCGCCGGGAGGCTCCGCGCGCTGCTGCTGGCGCTGGTGGTTCGCGG
GGATCCCCCGGGCGCCTACAACCTCGACCCGACGCGCCCGTGCCTCCAGGGCCCCGCTGACTCGTT
CTTCGGCTACGCAGTTCTGGAGCATTTCCACGACAACACGCGCTGGTCTTGTGGGCGCACCAAAGGCA
GATTCAAATACAGCCCTTCAGTGAAGTCTCCTGGGGCTGTGTTAAGTCCGTGTTACACCAACCCTG
ACCGGAGATGCACCGAAGTGGACATGGCTCGAGGGAAGAATCGGGGCACGTCCTGCGGAAAGACCTGCCG
GGAAGACCGCGATGATGAGTGGATGGGGTGGAGCTGGCCGACAGCCCAAGGCTGATGGCCGTGTGTTG
GCCTGTGCTCATCGCTGGAAGAATCTACTATGAAGCCGACCACATCCTACCCCATGGCTTCTGCTACA
TCATCCCCCTCAAACCTCCAGGCCAAAGGACGAGCCTGATCCCTTGTATGAAGAGTATAAGAAGAAGTA
CGGAGAGGAACACGGCTCCTGCCAGGCTGGGATAGCGGGCTTCTTACCAGGAGCTGGTGGTATGGGT
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AGAGCTGACCGAAGATCAGGCACCTTAATTAAGATCTTTCAAGCATCAGGTAAGGATGGGCTCTTACT
TCGGCTCCTCCTTGTGCGCAGTTGACCTGAATGGGGACGGCCTCTGACCTGCTGGTGGGGGCCCCCAT
GTTTTCTGAGATCAGGGATGAGGACAGGTCACTGTCTACATCAACAGAGGAAATGGAGCCCTCGAGGAG
CAGCTGGCTCTGACTGGGGATGGTGCCTACAATGCGCACTTTGGAGAGAGCATTGCCAGCCTGGACGATC
TGGACAATGATGGGTTCCAGATGTGGCCATTGGTGCACCAAGGAGGATGACTTCGAGGGGCGGTCTA
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CTCCATCTTCTCCGGGCTCCATCAACATCACAGCGCCTCAGTGTACGACGGACAGCAGCCTGTGAAC



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TGCCTGAACGTCACACCTGCTTCCAGCTTCCATGGCAAACACGTTCCAGGAGAGATTGGCCTGAATTATG
 TTCTGATGGCTGACGTGGCCAAAAGGAGAAGGGCCAGATGCCAGGGTCTACTTTGTGCTGCTGGGAGA
 GACCATGGGTGAGGTACAGAGAAGCTGCAGCTGACTTACATGGAGGAGACGTGTCTACTATGTGGCC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218815 representing NM_002207

Red=Cloning site Green=Tags(s)

MGGPAAPRAGRLRALLLALVVAGIPAGAYNLDPQRPVHFQGPADSFFGYAVLEHFDNTRWVLVGAPKA
 DSKYSPSVKSPGAVFKRVHTNDRRTELDMARGKNRGTSCGKTCREDRDEWGMVSLARQPKADGRVL
 ACAHRWKNIIYEAHILPHGFCYIIPSNLQAKGRTLIPCYEEYKKKYGEHSGCQAGIAGFFTEELVVMG
 APGSFYWAGTIKVLNLDNTYLLKLNDEVIMNRRYTYLGYAVTAGHFSHPSTIDVVGAPQDKGIGKYYIF
 RADRRSGTLIKIFQASGKMGSYFGSSLCAVDLNGDGLSDLLVGAPMFSEIRDEGQVTVYINRNGALEE
 QLALTDGAYNAHFGESIASLDDLNDGFPDVAIGAPKEDDFAGAVYIYHGDASGIVPQYSMKLSGQKIN
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 CLNVTTCFSFHGKHVPGEIGLNYVLMADVAKKEKGQMPRVYFVLLGETMGQVTEKLQLTYMEETCRHYVA
 HVKRRVQDVISPIVFEAAYSLSHVHTGEEERELPPLTPVLRWKKGQKIAQKNQTVFERNCRSEDCAADLQ
 LQKLLLLSSMDEKTLYLALGAVKNISLNISSNLGDDAYDANVSFNVSRELFINMWQKEEMGISCELLE
 SDFLKCSVGFPPMRSKSKYEFVIFDTSLSHSGEEVLSFIVTAQSGNTERSESLHDNTLVMVPLMHEVD
 TSITGIMSPTSFVYGESVDAANFIQLDDLECHFQPINITLQVYNTGPSTLPGSSVSI SFPNRLSSGGAEM
 FHVQEMVVGQEKGNCSFQKNPTPCIIPQEENIFHTIFAFFTKSGRKVLDCEKPGISCLTAHCNFSALAK
 EESRTIDIYMLLNTIILKDDSSSVIQFMSRAKVKVDPALRVVEIAHGNPEEVTVVFEALHNLPRGVVVG
 WIIAISLLVGILIFLLAVLLWKMGGFRRRYKEIEAEKNRKENEDSWDWWQKNQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6168_g01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_002207

ORF Size: 3105 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of 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. [More info](#)

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 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

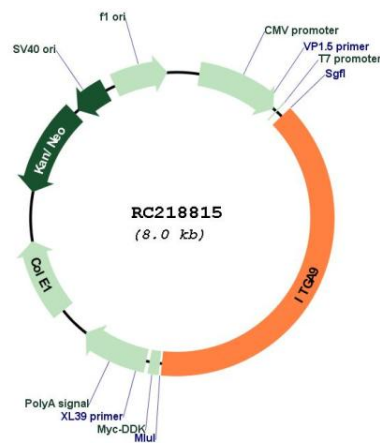
RefSeq: [NM_002207.3](#)

RefSeq Size: 3962 bp

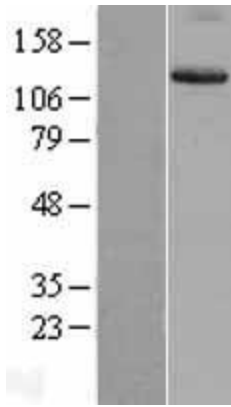
RefSeq ORF: 3108 bp

Locus ID: 3680
UniProt ID: [Q13797](#)
Cytogenetics: 3p22.2
Domains: FG-GAP
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
MW: 114.52 kDa
Gene Summary: This gene encodes an alpha integrin. Integrins are heterodimeric integral membrane glycoproteins composed of an alpha chain and a beta chain that mediate cell-cell and cell-matrix adhesion. The protein encoded by this gene, when bound to the beta 1 chain, forms an integrin that is a receptor for VCAM1, cytotactin and osteopontin. Expression of this gene has been found to be upregulated in small cell lung cancers. [provided by RefSeq, Jul 2008]

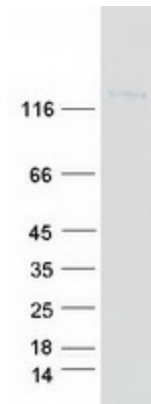
Product images:



Circular map for RC218815



Western blot validation of overexpression lysate (Cat# [LY400804]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218815 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ITGA9 protein (Cat# [TP318815]). The protein was produced from HEK293T cells transfected with ITGA9 cDNA clone (Cat# RC218815) using MegaTran 2.0 (Cat# [TT210002]).