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

Product datasheet for RG239915

ITGA8 (NM_001291494) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITGA8 (NM_001291494) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ITGA8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG239915 representing NM_001291494.
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCGCCCGGGGCCAGCCGCGGTCCCCGGGGAAGCCAGGCGCCGCTGATCGCGCCCCTCTGCTGCGCC
GCGGCCGCGCTGGGGATGTTGCTGTGGTCCCCCGCCTGTCAGGCGTTCAACCTGGACGTGGAAAAGCTC
ACAGTGTACAGCGGCCCCAAGGGCAGCTACTTCGGCTACGCCGTGGACTTCCACATACCCGACGCCCGC
ACAGCGAGTGTCTTGGTGGGGGCGCCCAAAGCCAACACCAGCCAGCCCGATATCGTGGAAGGGGGAGCC
GTCTATTACTGTCCTTGGCCCGCGGAGGGGTCTGCGCAGTGCAGGCAGATACCGTTTGACACCACCAAC
AACAGAAAGATCAGAGTTAATGGAACCAAAGAACCTATCGAGTTCAAATCCAATCAGTGGTTTGGAGCA
ACAGTGAAAGCTCACAAAGGAAAAGTTGTGGCCTGTGCTCCTTTATATCACTGGAGAACTCTTAAACCG
ACACCAGAAAAGGACCCAGTTGGCACCTGCTATGTAGCAATTCAGAACTTCAGCGCCTATGCCGAGTTC
TCTCCTTGCCGGAACAGCAATGCTGATCCGGAAGGCCAGGGTTACTGCCAAGCAGGATTTAGTCTGGAT
TTTTATAAGAATGGAGACCTTATTGTGGGAGGACCTGGGAGTTTCTACTGGCAAGGACAAGTGATCACT
GCCAGTGTTGCAGATATCATTGCAAATTACTCATTCAAGGATATCCTCAGGAAACTGGCAGGAGAAAAG
CAGACGGAAGTGGCTCCAGCTTCCTATGATGACAGTTACCTTGAATTGGTTGCTGGAATTCCAAGAGGA
GCACAGAATTTTGGATATGTTTCCATCATTAACTCTACGGATATGACGTTTATTCAGAATTTCACGGGA
GAACAGATGGCATCTTATTTTGGATATACCGTTGTCGTATCAGATGTTAACAGTGATGGACTGGATGAT
GTCCTGGTTGGGGCACCTCTCTTTATGGAACGTGAATTTGAGAGCAACCCCAGAGAAGTAGGGCAAATC
TACCTGTATTTGCAAGTGAGCTCTCTCCTCTTCAGAGACCCCCAGATCCTCACTGGCACCGAGACGTTT
GGGAGATTCGGTAGTGCTATGGCACACTTAGGAGACCTGAACCAAGATGGATACAATGACATTGCCATC
GGAGTGCCTTTTGCAGGCAAGGATCAAAGAGGCAAAGTGCTCATTTATAATGGGAACAAAGATGGCTTA
AACACCAAGCCTTCCCAAGTTCTGCAAGGAGTGTGGGCCTCACATGCTGTCCCTTCCGGATTTGGCTTT
ACTTTAAGAGGAGATTCAGACATAGACAAGAATGATTACCCAGATTTGATTGTGGGTGCATTTGGAACA
GGAAAAGTCGCTGTTTACAGAGCAAGACCGGTTGTGACTGTAGATGCCCAGCTTCTGCTGCACCCAATG
ATTATCAATCTTGAAAATAAAACTTGCCAGGTTCCAGACTCTATGACATCTGCTGCCTGCTTTTCTTTA
AGAGTATGTGCATCTGTCACAGGCCAGAGCATTGCAAACACAATAGTCTTGATGGCAGAGGTGCAATTA
GATTCCCTGAAACAGAAAGGAGCTATTAAACGGACGCTCTTCCTTGATAACCATCAGGCTCATCGCGTC
TTCCCTCTTGTGATAAAAAGGCAGAAATCCCACCAGTGCCAGGATTTCATCGTTTACCTTCGAGATGAA
ACTGAATTCCGAGATAAATTATCTCCAATCAACATTAGTTTGAATTACAGTTTGGACGAATCCACCTTT
AAAGAAGGCCTGGAAGTGAAACCAATATTGAACTACTACAGAGAAAACATTGTTAGTGAACAGGCTCAC
ATTCTGGTGGACTGTGGAGAAGACAATCTGTGTGTTCCTGACTTGAAGCTGTCGGCTAGACCAGATAAG
CATCAGGTAATCATTGGAGATGAAAATCACCTTATGCTCATAATAAATGCAAGAAATGAAGGGGAAGGA
GCATATGAAGCTGAACTCTTTGTAATGATACCAGAAGAGGCAGATTATGTTGGAATCGAACGCAACAAC
AAGGGATTTCGACCACTGAGCTGTGAGTACAAGATGGAAAATGTAACCAGGATGGTGGTGTGTGACCTT
GGGAACCCTATGGTGTCTGGAACAAATTATTCCCTGGGCCTCCGATTTGCAGTTCCACGTCTTGAGAAA
ACAAACATGAGCATTAACTTCGATCTCCAAATCAGAAGTTCCAACAAGGACAATCCAGACAGCAATTTT
GTGAGCCTGCAAATCAACATCACTGCTGTAGCGCAGGTGGAAATAAGAGGAGTGTCACACCCTCCGCAG
ATTGTTCTGCCCATTCATAACTGGGAACCAGAAGAGGAGCCCCACAAAGAGGAGGAGGTTGGACCATTG
GTGGAACATATTTATGAGCTGCACAATATTGGACCAAGTACCATCAGTGACACCATCCTGGAGGTGGGC
TGGCCTTTCTCTGCCCGGGATGAATTTCTTCTCTATATTTTCCATATTCAAACTCTGGGACCTCTGCAG
TGCCAACCAAATCCTAATATCAATCCACAGGATATAAAGCCTGCTGCCTCCCCAGAGGACACCCCTGAG
CTCAGCGCCTTTTTGCGAAACTCTACTATTCCTCATCTTGTCAGGAAGAGGGATGTACATGTGGTCGAA
TTCCACAGACAGAGCCCTGCAAAAATACTGAATTGTACAAATATCGAGTGTTTACAAATCTCCTGTGCA
GTGGGACGACTCGAAGGAGGAGAAAGCGCAGTCCTGAAAGTCAGGTCACGATTATGGGCCCACACCTTC
CTCCAGAGAAAAAATGATCCCTATGCTCTTGCATCCCTGGTGTCCTTTGAAGTTAAGAAGATGCCTTAT
ACAGATCAGCCAGCAAAACTCCCAGAAGGAAGCATAGTAATTAAGACATCAGTTATTTGGGCAACTCCG
AATGTTTCCTTCTCAATCCCATTATGGGTAATAATACTAGCAATACTTCTTGGATTGTTGGTTCTCGCC
ATTTTAACCTTAGCTTTATGGAAGTGTGGATTCTTTGACAGAGCCAGACCTCCTCAGGAGGACATGACC
GACAGGGAACAGCTGACAAATGACAAGACCCCTGAGGCA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

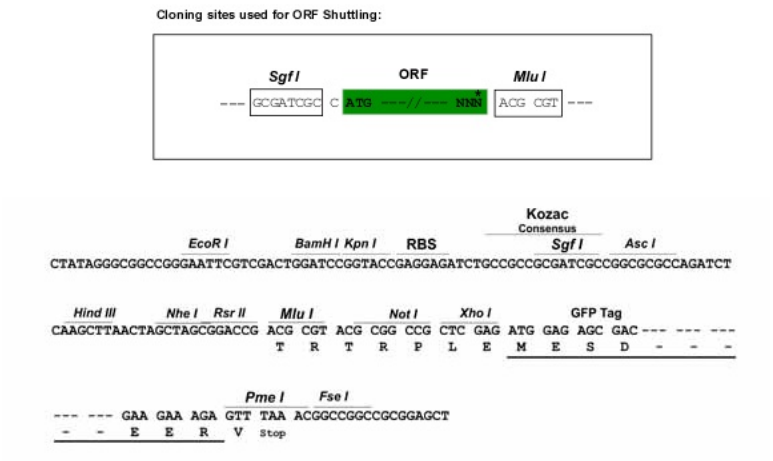
Protein Sequence:

>Peptide sequence encoded by RG239915
Blue=ORF Red=Cloning site Green=Tag(s)

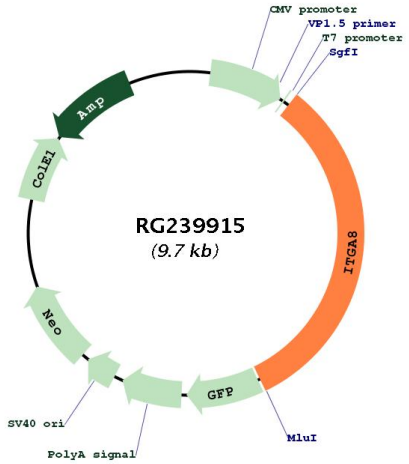
MSPGASRGPRGSQAPLIAPLCCAAAALGMLLWSPACQAFNLDVEKLTVYSGPKGSYFGYAVDFHIPDAR
TASVLVGAPKANTSQPDIVEGGAVYYCPWPAEGSAQCRQIPFDTTNNRKIRVNGTKEPIEFKSNQWFGA
TVKAHKGKVVACAPLYHWRTLKPTPEKDPVGTCYVAIQNFSAYAEFSPCRNSNADPEGQGYCQAGFSLD
FYKNGDLIVGGPGSFYWQGQVITASVADIIANYSFKDILRKLAGEKQTEVAPASYDDSYLELVAGIPRG
AQNFGYVSIINSTDMTFIQNFTGEQMASYFGYTVVVSDVNSDGLDDVLVGAPLFMEREFESNPREVGQI
YLYLQVSSLLFRDPQILTGTETFGRFGSAMAHLGDLNQDGYNDIAIGVPFAGKDQRGKVLIYNGNKDGL
NTKPSQVLQGVWASHAVPSGFGFTLRGDSDIDKNDYPDLIVGAFGTGKVAVYRARPVVTVDAQLLLHPM
IINLENKTCQVPDSMTSAACFSLRVCASVTGQSIANTIVLMAEVQLDSLKQKGAIKRTLFLDNHQAHRV
FPLVIKRQKSHQCQDFIVYLRDETEFRDKLSPINISLNYSLDESTFKEGLEVKPILNYYRENIVSEQAH
ILVDCGEDNLCVPDLKLSARPDKHQVIIGDENHLMLIINARNEGEGAYEAELFVMIPEEADYVGIERNN
KGFRPLSCEYKMENVTRMVVCDLGNPMVSGTNYSLGLRFAVPRLEKTNMSINFDLQIRSSNKDNPDSNF
VSLQINITAVAQVEIRGVSHPPQIVLPIHNWEPEEEPHKEEEVGPLVEHIYELHNIGPSTISDTILEVG
WPFSARDEFLLYIFHIQTLGPLQCQPNPNINPQDIKPAASPEDTPELSAFLRNSTIPHLVRKRDVHVVE
FHRQSPAKILNCTNIECLQISCAVGRLEGGESAVLKVRSRLWAHTFLQRKNDPYALASLVSFEVKKMPY
TDQPAKLPEGSIVIKTSVIWATPNVSFSIPLWVIILAILLGLLVLAILTLALWKCGFFDRARPPQEDMT
DREQLTNDKTPEA
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001291494
ORF Size:	3144 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).
RefSeq:	NM_001291494.1, NP_001278423.1
RefSeq Size:	6937 bp
RefSeq ORF:	3147 bp
Locus ID:	8516
Cytogenetics:	10p13
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:	116.4 kDa

Gene Summary: Integrins are heterodimeric transmembrane receptor proteins that mediate numerous cellular processes including cell adhesion, cytoskeletal rearrangement, and activation of cell signaling pathways. Integrins are composed of alpha and beta subunits. This gene encodes the alpha 8 subunit of the heterodimeric integrin alpha8beta1 protein. The encoded protein is a single-pass type 1 membrane protein that contains multiple FG-GAP repeats. This repeat is predicted to fold into a beta propeller structure. This gene regulates the recruitment of mesenchymal cells into epithelial structures, mediates cell-cell interactions, and regulates neurite outgrowth of sensory and motor neurons. The integrin alpha8beta1 protein thus plays an important role in wound-healing and organogenesis. Mutations in this gene have been associated with renal hypodysplasia/aplasia-1 (RHDA1) and with several animal models of chronic kidney disease. Alternate splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Apr 2014]