

Product datasheet for **RG215802**

IRAG1 (NM_001100167) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRAG1 (NM_001100167) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IRAG1
Synonyms:	IRAG; JAW1L; MRV11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG215802 representing NM_001100167
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCTGAACAGCCCTCAGCCTGGCCCCGTGGAGAGCGAGCTGGGAAGCAGCTCTTGAAACGGGCT
 GGGAGGGCAGCCCTCTGCCGAGAAGTCCAACCCAGGATGCGGCAGGAGTGGGTCCCCAGCCTCCCAGGG
 GAGAGGCCAGCTGGAGAGCCGATGGGGCCGAGGCTGGCTCCAAAGCTGAGCTTCCACCCACTGTGTCC
 CGGCCCCCGCTGCTGCGAGGGCTCTCCTGGGACAGTGGCCCTGAAGAACCTGGCCCCGGCTGCAGAAAG
 TGCTTGCCAAAGCTGCCACTGGCAGAGGAAGAAAAGCGTTTTGCAGGCAAGGCCGGCGGAAGCTGGCCAA
 GGCCCTGGTCTCAAAGACTTTAGATACAAGTGCAGCCCGTGGGATGCAGAACTGACCAAGCTCCGA
 GAGGAGCATCCTGATGAGAAATCAGAACTTAGTGGGGCTCAAGCTTCCAGACCTTAGTGAAGCAGCTG
 AGCAGGAAAAAGGGCTTCTTCTGAAGTCTCCCGAGCTATTGAGGAAGAAGAGTCAAAGAGTGGCTTAGA
 TGTGATGCCTAATATTTCTGATGTGCTGCTGCGCAAACTGCGGGTCCACAGGAGTCTCCCTGGAAGTGCC
 CCTCCACTCACTGAAAAGGAAGTTGAGAACGTGTTTGTGCAACTGCTTGGCCTTTAGAAATGACAGCT
 ACACTCTGGAATCTAGAATTAACCAAGGTGAAAGGGAACGCAACCTGACAGAGGAGAACACTGAGAAAGA
 ACTGGAAGCTTCAAAGCTTCCATTACGTCTCAGCTTCACTCTGGCACCCTGTGAGCACCAGGAAACC
 TACCAGAAGTTGCTGGAGGACATCGCTGTCTGCAACCGCTGGCTGCCCGCCTCTCCAGCCGAGCTGAGG
 TGGTAGGCGCCGTCCGCCAGGAAAGCGCATGTCGAAAGCAACGGAAGTATGATGCAGTATGTGGAGAA
 TCTAAAGAGGACGATGAGAAAGGACCATGCGGAGCTCATGGAGTTTAAAAAGCTTGCAATCAGAATTCA
 AGCCGAGCTGTGGCCCTCTGAAGATGGGGTCCCTCGCACGGCACGGTCCATGTCCCTCACGCTGGGAA
 AGAATATGCCTCGCCGGAGGGTCAGCGTTGCTGTGGTTCTAAGTTTAAATGCCCTGAATCTGCCTGGCCA
 AACTCCAGCTCATCATCCATTCCCTCTTACCAGCCTTGTGGAATCACCCAATGGGAAAGGCAGCCTA
 CCTGTCACTTCAGCACTGCCTGCACTTTTGAAAATGGAAGACAAATGGGGACCCAGATTGTGAAGCCT
 CTGCTCTGCGCTGACCCTGAGCTGCCTGGAGGAGCTTAGTCAGGAGACCAAGGCCAGGATGGAGGAAGA
 AGCCTACAGCAAGGGATTCCAAGAAGGTCTAAAGAAGACCAAAGAACTTCAAGACCTGAAGGAGGAGGAG
 GAAGAACAGAAGAGTGAAGTCTGAGGAACCTGAAGAGGTAGAAGAACTGAGGAAGAGGAAAAGGGCC
 CAAGAAGCAGCAAACTTGAAGAATTGGTCCATTTCTTACAAGTCATGTATCCCAACTGTGTCAGCACTG
 GCAAGTATCTGGATGATGGCTGCACTGATGCTGGTCTTGAAGTGTGTGCTGGGGCTCTACAATTCCTAT
 AACTCTTGTGAGAGCAGGCTGATGGGCCCTTGAAGATCCACTTGCTCGGCAGCCAGAGGGACTCCT
 GGTGGAGCTCAGGACTCCAGCATGAGCAGCCTACAGAGCAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG215802 representing NM_001100167
 Red=Cloning site Green=Tags(s)

MALNSPQPGPVESELGKQLKGTGEGSPLPRSTQDAAGVGPASQGRGPAGEPMGPEAGSKAELPPTVS
 RPPLLRLGLSWDSGPEEPGRLQKVLAKLPLAEEERFAGKAGGLAKAPGLKDFQIQVQPVVMQKLTCLR
 EEHILMRNQLVGLKLPDLSEAAEQEKLPSLSPAIEEESKSGLDVMPNISDVLLRLKRVHRSPLPGSA
 PPLTEKEVENVFQVLSLAFRNDSTYLSRINQAERERNLTEENTEKELENFKASITSSASLWHHCEHRET
 YQKLLEDIAVLHRLAARLSSRAEVVGAVRQEKMSKATEVMMQYVENLKRTYEKDHAELEMEFKLANQNS
 SRSCGPSEDGVPRTARMSLTGKNMPPRRVSVAVVPKFNALNLPQGTPSSSSIPSLPALSESPNGKGS
 PVTALPALLENGKTNGDPDCEASAPALTSCLEELSQETKARMEEEAYSQGFQEGLEKTKELQDLKEEE
 EEQKSESPEEPEVEETEEEEKGPRSSKLEELVHFLQVMYPKLCQHWQVIWMAAVMLVLTVVGLYNSY
 NSCAEQADGPLGRSTCSAAQRDSWWSSGLQHEQPTQ

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001100167

ORF Size: 1791 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.

RefSeq: [NM_001100167.3](#)

RefSeq Size: 6040 bp

RefSeq ORF: 1794 bp

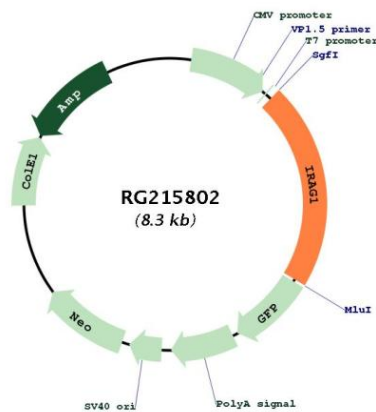
Locus ID: 10335

UniProt ID: [Q9Y6F6](#)

Cytogenetics: 11p15.4

Protein Families:	Transmembrane
Protein Pathways:	Vascular smooth muscle contraction
Gene Summary:	This gene is similar to a putative mouse tumor suppressor gene (Mrvi1) that is frequently disrupted by mouse AIDS-related virus (MRV). The encoded protein, which is found in the membrane of the endoplasmic reticulum, is similar to Jaw1, a lymphoid-restricted protein whose expression is down-regulated during lymphoid differentiation. This protein is a substrate of cGMP-dependent kinase-1 (PKG1) that can function as a regulator of IP3-induced calcium release. Studies in mouse suggest that MRV integration at Mrvi1 induces myeloid leukemia by altering the expression of a gene important for myeloid cell growth and/or differentiation, and thus this gene may function as a myeloid leukemia tumor suppressor gene. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene, and alternative translation start sites, including a non-AUG (CUG) start site, are used. [provided by RefSeq, May 2011]

Product images:



Circular map for RG215802