

Product datasheet for SC316838

IRAG1 (NM_001100163) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: IRAG1 (NM_001100163) Human Untagged Clone

Tag: Tag Free Symbol: IRAG1

Synonyms: IRAG; JAW1L; MRVI1

Vector: <u>pCMV6 series</u>

OriGene Technologies, Inc.

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Fully Sequenced ORF:

>NCBI ORF sequence for NM_001100163, the custom clone sequence may differ by one or more nucleotides

CTGACTGGGGATGCCACTTCACCAGAAGGAGAAACCGACAAAAACCTGGCCAACAGAGTT CACAGTCCCCACAAGAGGCTTTCTCACCGACACTTGAAGGTGTCCACTGCCTCCCTGACA TCTGTGGACCCCGCGGGGCACATCATTGACCTGGTGAATGACCAGCTGCCAGACATCAGC ATCTCAGAGGAGGACAAGAAGAAAACCTGGCGCTGCTGGAAGAAGCCAAGTTGGTGAGT GAGCGATTCCTGACCCGCCGTGGGAGGAGGTCCAGGAGCAGCCCCGGAGACTCCCCATCA GCTGTTTCCCCGAACCTCAGCCCCAGCGCTTCTCCTACATCCTCTCGGAGCAACTCACTT ACAGTCCCCACCCGCCAGGTTTGGATGTGTGCAGTGGCCCGCCATCCCCTCTGCCTGGA GCACCACCACAGAAGGGGGATGAGGCCGACGTCTCTTCACCTCACCCTGGCGAGCCTAAC GTCCCCAAAGGGCTAGCTGACAGGAAGCAGAATGACCAGAGGAAAGTGTCTCAGGGCAGG CTGGCTCCTCCTCCAGTTGAGAAGTCCAAAGAGATTGCAATAGAACAAAAGGAA AACTTCGATCCCCTCCAGTACCCCGAGACCACACCCAAAGGCCTAGCTCCTGTTACAAAC AAGCAGCTCTTGAAAACGGGCTGGGAGGGCAGCCCTCTGCCGAGAAGTCCAACCCAGGAT GCGGCAGGAGTGGGTCCCCCAGCCTCCCAGGGGAGAGGCCCAGCTGGAGAGCCGATGGGG CCCGAGGCTGGCTCCAAAGCTGAGCTTCCACCCACTGTGTCCCGGCCCCCGCTGCTGCGA GGGCTCTCCTGGGACAGTGGCCCTGAAGAACCTGGCCCCCGGCTGCAGAAAGTGCTTGCC AAGCTGCCACTGGCAGAGGAAGAAAAGCGTTTTGCAGGCAAGGCCGGCGGCAAGCTGGCC AAGGCCCCTGGTCTCAAAGACTTTCAGATACAAGTGCAGCCCGTGCGGATGCAGAAACTG ACCAAGCTCCGAGAGGAGCACATCCTGATGAGAAATCAGAACTTAGTGGGGCTCAAGCTT ATTGAGGAAGAAGAGTCAAAGAGTGGCTTAGATGTCATGCCTAATATTTCTGATGTGCTG GAAGTTGAGAACGTGTTTGTGCAACTGTCCTTGGCCTTTAGAAATGACAGCTACACTCTG GAATCTAGAATTAACCAGGCTGAAAGGGAACGCAACCTGACAGAGGAGAACACTGAGAAA GAACTGGAAAACTTCAAAGCTTCCATTACGTCCTCAGCTTCACTCTGGCACCACTGTGAG CACCGGGAAACCTACCAGAAGTTGCTGGAGGACATCGCTGTCCTGCACCGCCTGGCTGCC CGCCTCTCCAGCCGAGCTGAGGTGGTAGGCGCCGTCCGCCAGGAAAAGCGCATGTCGAAA GCAACGGAAGTGATGCAGTATGTGGAGAATCTAAAGAGGACGTATGAGAAGGACCAT GCGGAGCTCATGGAGTTTAAAAAGCTTGCAAATCAGAATTCAAGCCGCAGCTGTGGCCCC TCTGAAGATGGGGTCCCTCGCACGGCACGGTCCATGTCCCTCACGCTGGGAAAGAATATG CCTCGCCGGAGGGTCAGCGTTGCTGTGGTTCCTAAGTTTAATGCCCTGAATCTGCCTGGC CAAACTCCCAGCTCATCATCCATTCCCTCCTTACCAGCCTTGTCGGAATCACCCAATGGG AAAGGCAGCCTACCTGTCACTTCAGCACTGCCTGCACTTTTGGAAAAATGGAAAGACAAAT GGGGACCCAGATTGTGAAGCCTCTGCTCCTGCGCTGACCCTGAGCTGCCTGGAGGAGCTT AGTCAGGAGACCAAGGCCAGGATGGAGGAAGAAGCCTACAGCAAGGGATTCCAAGAAGGT CTAAAGAAGACCAAAGAACTTCAAGACCTGAAGGAGGAGGAGGAAGAACAGAAGAGTGAG AGTCCTGAGGAACCTGAAGAGGTAGAAGAACTGAGGAAGAGGAAAAGGGCCCAAGAAGC AGCAAACTTGAAGAATTGGTCCATTTCTTACAAGTCATGTATCCCAAACTGTGTCAGCAC TGGCAAGTGATCTGGATGATGGCTGCAGTGATGCTGGTCTTGACTGTTGTGCTGGGGCTC TACAATTCCTATAACTCTTGTGCAGAGCAGGCTGATGGGCCCCTTGGAAGATCCACTTGC TCGGCAGCCCAGAGGGACTCCTGGTGGAGCTCAGGACTCCAGCATGAGCAGCCTACAGAG CAG

Restriction Sites: Please inquire ACCN: NM 001100163



IRAG1 (NM_001100163) Human Untagged Clone - SC316838

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001100163.1</u>, <u>NP 001093633.1</u>

 RefSeq Size:
 6323 bp

 RefSeq ORF:
 2466 bp

 Locus ID:
 10335

 UniProt ID:
 Q9Y6F6

Cytogenetics:

Protein Families: Transmembrane

Protein Pathways: Vascular smooth muscle contraction

11p15.4



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]

Transcript Variant: This variant (3) differs in the 5' UTR, lacks a portion of the 5' coding region, initiates translation from an downstream in-frame non-AUG (CUG) start codon, and uses an alternate in-frame splice site in the central coding region, compared to variant 1. The encoded isoform (b, also known as MRVI1B) is shorter at the N-terminus, compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.