

## Product datasheet for **RC215686**

### **IRAG1 (NM\_001100163) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	IRAG1 (NM_001100163) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IRAG1
Synonyms:	IRAG; JAW1L; MRV11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC215686 representing NM\_001100163  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

CTGACTGGGGATGCCACTTCACCAGAAGGAGAAACCGACAAAAACCTGGCCAACAGAGTTACAGTCCCC  
 ACAAGAGGCTTTCTCACCAGACACTTGAAGGTGTCCACTGCCTCCCTGACATCTGTGGACCCCGGGGCA  
 CATCATTGACCTGGTGAATGACCAGCTGCCAGACATCAGCATCTCAGAGGAGGACAGAAGAAAAACCTG  
 GCGCTGTGGAAGAAGCCAAGTTGGTGAAGTGAAGGATTCTGACCCGCCGTGGGAGGAAGTCCAGGAGCA  
 GCCCCGGAGACTCCCATCAGCTGTTTCCCGAACCTCAGCCCCAGCGCTTCTCTACATCTCTCGGAG  
 CAACTCACTTACAGTCCCCACCCGCCAGGTTTGGATGTGTGCAGTGGCCCGCCATCCCCTCTGCCTGGA  
 GCACCACCACAGAAGGGGATGAGGCCGACGTCTTTCACCTCACCTGGCGAGCCTAACGTCCCCAAAG  
 GGCTAGCTGACAGGAAGCAGAATGACCAGAGGAAAGTGTCTCAGGGCAGGCTGGCTCCTCGTCTCTCC  
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 ACACCCAAAGGCCTAGCTCCTGTTACAAACAGCAGTGGGAAAATGGCCCTGAACAGCCCTCAGCCTGGCC  
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 AACCCAGGATGCGGCAGGAGTGGGTCCCCAGCCCTCCAGGGGAGAGGCCAGCTGGAGAGCCGATGGGG  
 CCCGAGGCTGGCTCAAAGCTGAGCTTCCACCCACTGTGTCCCGGCCCGCTGTGCGAGGGCTCTCT  
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 ACGTGTGTGCAACTGTCTTGGCCTTTAGAAATGACAGCTACACTCTGGAATCTAGAATTAACCAGGC  
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 CATGTGAAAAGCAACGGAAGTATGATGCAGTATGTGGAGAATCTAAAGAGGACGTATGAGAAGGACCAT  
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 GGAGGAGCTTAGTCAGGAGACCAAGGCCAGGATGGAGGAAGAAGCCTACAGCAAGGGATTCCAAGAAGGT  
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 CCCTTGAAGATCCACTTGTGCGCAGCCAGAGGGACTCCTGGTGGAGCTCAGGACTCCAGCATGAGCA  
 GCCTACAGAGCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC215686 representing NM\_001100163  
 Red=Cloning site Green=Tags(s)

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LTGDATSPEGETDKNLANRVHSPHKRLSHRHLKVSTASLTSVDPAGHIIDL VNDQLPDISISEEDKKKLN
ALLEEAKLVSERFLTRRGRKSRSSPGDSPSAVSPNLSASPTSSRSNSLTVPTPPGLDVCSGPPSPLPG
APPQKGDEADVSSPHPGEPNVPKGLADRKQNDQRKVSQGRAPRPPVVEKSKEIAIEQKENFDLPQYPET
TPKGLAPVTNSSGKMALNSPQGPVVESELGKQLLKTGWEGSPLPRSPTQDAAGVGPPASQGRGPAGEPMG
PEAGSKAELPPTVSRPPLLRLGLSWDSGPEEPGPRLLQKVLAKLPLAEEEKRFAGKAGGKLAKAPGLKDFQI
QVQPVRMQKLTCLREEHILMRNQNLVGLKLPDLSEAAEQEKGLPSELSPAIEEEEKSGLDVMPNISDVL
LRKLRVHRSLPGSAPPLTEKEVENVFVQLSLAFRNSYTLERINQAERERNLTEENTEKELENFKASIT
SSASLWHHCEHRETYQKLLIEDIAVLHRLAARLSSRAEVGAVRQEKRMKATEVMMQYVENLKRTYEKDH
AELMEFKLANQNSSRSCGPESEDGVPRTARSMSLTLGKNMPRRRVSVAVVPKFNALNLPGQTPSSSSIPS
LPALSESPNGKGSPLVTSALPALLENGKTNGDPDCEASAPALTLSCLEELSQETKARMEEEAYSKGFQEG
LKKTKELQDLKEEEEQKSESPEEPEEVEETEEEEKGRSSKLEELVHFLQVMPKLCQHWQVIWMAAV
MLVLTVVLLGLYNSYNSCAEQADGPLGRSTCSAAQRDSWSSSGLQHEQPTEQ
  
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001100163

**ORF Size:** 2463 bp

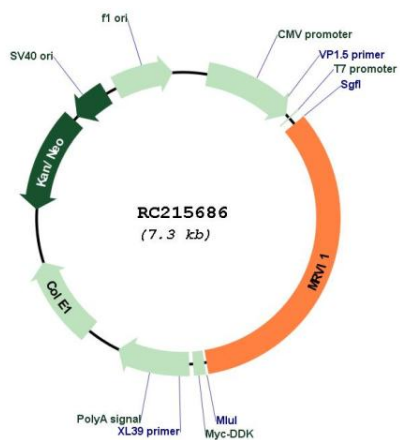
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><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></ol>
<b>RefSeq:</b>	<a href="#">NM_001100163.3</a>
<b>RefSeq Size:</b>	6323 bp
<b>RefSeq ORF:</b>	2466 bp
<b>Locus ID:</b>	10335
<b>UniProt ID:</b>	<a href="#">Q9Y6F6</a>
<b>Cytogenetics:</b>	11p15.4
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Vascular smooth muscle contraction
<b>MW:</b>	89.7 kDa
<b>Gene Summary:</b>	<p>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]</p>

Product images:



Circular map for RC215686