

Product datasheet for **RC220170**

IRAG1 (NM_001098579) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRAG1 (NM_001098579) 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:

>RC220170 representing NM_001098579
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220170 representing NM_001098579
 Red=Cloning site Green=Tags(s)

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MGMDLTCFPGVSPACGAQASWSIFGADAAEVPGTRGHSQQEAAMPHIPEDEEPPGEPQAAQSPAGQGPPPT
AGVSCSPTPTIVLTGDAT SPEGETDKNLANRVHSPHKRLSHRHLKVSTASLTSVDPAGHIIDL VNDQLPD
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DVCSGPPSPLPGAPPQKGDEADVSSPHGEPNVPKGLADRKQNDQRKVSQGR LAPRPPVVEKSKEIAIEQ
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PGQTPSSSIPSPALSESPNGKGLPVT SALPALLENGKTNGDPDCEASAPAL TLSCLEELSQETKARM
EEEAYS KGFQ EGLKKTKE LQDLKEEEEQKSE SPEEPEEVEE TEEEEKGPRSSKLEELVHFLQVMYPKLC
QHWQVIWMMAAVMLVLT VVVLGLYNSYN SCAEQADGPLGRSTCSAAQRDSWWS SGLQHEQPT EQ
  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8005_g07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

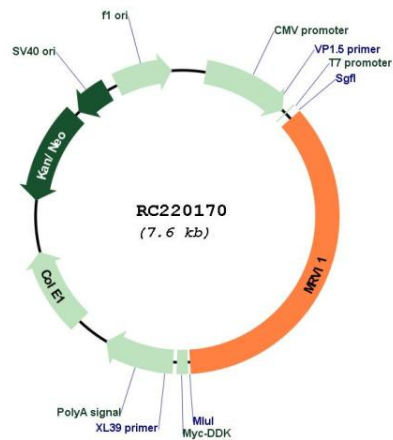
Cloning sites used for ORF Shuttling:



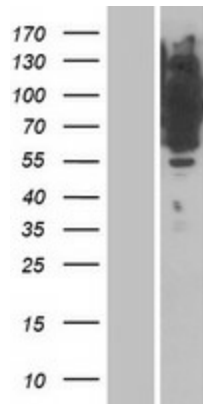
* The last codon before the Stop codon of the ORF

ACCN: NM_001098579

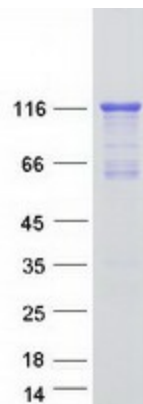
ORF Size:	2709 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. 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:	<ol style="list-style-type: none">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_001098579.1 , NP_001092049.1
RefSeq Size:	6042 bp
RefSeq ORF:	2715 bp
Locus ID:	10335
UniProt ID:	Q9Y6F6
Cytogenetics:	11p15.4
Protein Families:	Transmembrane
Protein Pathways:	Vascular smooth muscle contraction
MW:	97.7 kDa
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 RC220170



Western blot validation of overexpression lysate (Cat# [LY420639]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220170 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MRV1 protein (Cat# [TP320170]). The protein was produced from HEK293T cells transfected with MRV1 cDNA clone (Cat# RC220170) using MegaTran 2.0 (Cat# [TT210002]).