

Product datasheet for **RR200093**

Irag1 (NM_001105211) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Irag1 (NM_001105211) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Irag1
Synonyms:	Mrvi1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR200093 representing NM_001105211
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCAAAACCAACAGCTGATTTGTGGCTCTTGGATCCTGGAAAGGGAACCCAGCTTGGAAACAGGGATGG
 GAAGGAGTTTACTTGTCTTTTGGCGTCTCCCCAGCCTGCGGAGCCCAAGCCTCTTGGAGCATCTTTGG
 GTTGTACAGCAGAGGTTCCAGGCACGCACAGCCACTCCAACCAGGCGGCTGCCATGCCCCACATTCTCT
 GAGGATGAGGAGCCCCCGGAGAGCCACAGGCAGCCAGACCCAAGACTCTCCCTCTGCAGGACCGTTTTT
 GCAGCCCTCCCACAATCATCCTGACGGGGGATGCCAGTTCACCTGGAGGAGAGACTGACACAAATCTGGT
 CAAGAGGGCTCCCAGCCCCACCGCAGGCTTCCACCGACACCTGAAGGTCTCCACTGCCTCGTGACT
 TCTGTGGACCCCTTGGGGCACGTATTGACCTGGTAAATGACCAGCTGCCGGACATCAGCATCTCAGAAG
 AGGACAAGAAGAAAACCTGGCACTTCTAGAAGAAGCCAAGTTGGTTAGCGAGCGGTTCTGACCCGCCG
 CGGGAGGAGATCAAGGAGCAGCCTCGGAGACGCCCATCAGCTGTTTCTCAAACCTCAGCTCTGGAGCT
 TCTCTGCATCCTCTAGGAGTTGCTCGTTCACCATCTCCACACCACAGGTTTTGACACATGCAGTGGCC
 CACAGTCCCTCTGCCGGGATCACCAGCACAGCAAAAGGGACATGAGGATGATGTCTTCTCGTCTCACCT
 CGGAGAGCCTAATGCCTCCAAAGGGCTAGCTGACCGGAAGCAGAAATGACCAGAGGAAAGTGTCTCAAGGC
 AGACTGGCTCCTCGTCTCCCACAGTGGAGAAATCCAAAGAACTTTCAGTAGAACAAAAGGAAAACCTTCG
 ATCCCCCTCAGCATCTGGAGGCCACACCCATGGCTCAGACCTCTGGAGCAAGCGTCAGTGGGAAAATGGC
 GCTGAACAGTCCCAGCCTGGCCCTGCGGAGATGGAGCTGGGGAGGCAGCTTCTGAAGACAGCCAGGGAA
 GACAACCTCTGCCAGAACCACAGTCCAGGGCTCAGGAGGAACGGCCTCCCACATTCTCAGGGACAGG
 GCTCTGCTGGAGAGCTTATGGGGCCCAAGGCTGGCTCCAAGGCTGAGCCGAGGCTCTGTGTCGGGCC
 CCCTCTGATTCCGGGGGTCTCTGGGACAGCAGCCCTGAAGAACCTGGTCCCTGCTGCAAAAGGTGCTC
 GCTAAGCTGCCTCTGGCAGGAAGAAAAGCGGTTTCCAGGCAAAAGCCAAGCCAGCCAAGCCACCGGGG
 TCAAAGACTTCCAGATACAAGTACAGCCGGTGCAGATGCAGAAGCTGACCAAGCTTCCGGAGGAACACAT
 CCTGATGAGAAACCAGAACCCTGGTGGGGTTCAAGCTCCCTGAACTGAGTGAAGCTGCAGAGCAAGACAAA
 GGAGTCTCATCTGAGCTTGGCCAGCAGCTGAGGAAGAAGAATCAAAGAGTGGTCTGGATGTGATGCCCA
 ACATTTCTGACATATTGCTACGTAACCTAGGGTTCACAAGTCACTCACTGGAAGCGCCCTCCGCTCAC
 AGAAAAGGAAGTCGAGAACGTGTTGTACAAGTGCCTTGGCCTTTAGAAATGACAGCTACACCTTGGAG
 TCTAGGATTAACCAGGCTGAAAGGGAACGCAACTTGACGGAAGAGAACACCGAGAAGGAACTGGAAAAC
 TCAAAGCCTCTATTACGTCCTCAGCATCCATCTGGTACCACTGCGAGCACCGGGAGACCTACCAGAAGCT
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 GTGCGCCAGGAAAAGCGCATGTCAAAGGCCACGGAAAGTATGATGCAGTATGTGGAGAATCTGAAGAGAA
 CGTACGAGAAGGACCATGCTGAGCTCATGGAAATTAAGAACTCGCAATCAGAAATCTAGTCGAGCTG
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 CCACTCCCAAGCTACCCGAGGAGACGACCAAGAGGCCAAGGCCAGAGCAGAGGAAGAAGCCTACAACA
 AAGGATACCAGGAAGGGTAAAGAAGACCGAAGAACTTCAAGACCTGAAGGAGGAGGAAGAGGAACAGAA
 GGCAGAGAGTCTCAGGAACCAGAAGAGGTGGAAGAAACCCAGGAAGACGAGAAGGACCAGAGAAGCAGC
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 GGATGATGGCCGCTGTGATGCTGGTCTTGGTGTGCTTGGGCTCTACAGTCTCTATAACTCTGCAC
 GGAGCAGGCCGACGGGCCCTGGGAGATCCACCTGCTCTGCAGCCAGCGGGACTCCTGGTGGAGCTCG
 GGACTCCAGCAAGAGCTGCCAGCAGAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RR200093 representing NM_001105211
 Red=Cloning site Green=Tags(s)

MQNQTADLWLLDPGKGTQLGTGMGRSLTCPFGVSPACGAQASWSIFGVVTAIEVPGTHSHSNQAAAMPHIP
 EDEEPPGEPQAAQTQDPSAGPFCSPPTIILTDASSPGGETDTNLVKRAPSPHRRLSHRHLKVSTASLT
 SVDPLGHVIDLVNDQLPDISISEEDKKNLALLEEAKLVSERFLTRRGRSRSSLDAPSAVSPNLSGA
 SPASSRSCSFTISTPPGFDTCSGPQSPPLGPSAQKQGHEDDVSSHLEGPNASKGLADRKQNDQRKVSQG
 RLAPRSPTVEKSKEL.SVEQKENFDPLQHLEATPMAQTS GASVSGKMALNSPQPGAEMELGRQLLKTARE
 DNPLPRTTVQGGGTASPHSQGQSAGELMGPKAGSKAEPRPPVSRPPLIRGVSWDSSPEEPGPLLQKVL
 AKLPLAEEEEKRFPGKAKPAKPPGLKDFIQVQPVVMQKLTCLREEHILMRNQNLVGFKLPELSEAAEQDK
 GVSSELAPAAAAEESKGLDVMPIISDILLRKL RVHKS LTGSAPPLTEKEVENVFVQLSLAFRND SYTLE
 SRINQAERERNL TEENTEKEL ENFKASITSSASIWYHCEHRETYQKLEDDIAVLHRLAARLSSRAEVVGA
 VRQEKRM SKATEVMMQYVENLKRTEYKDHAE LMEFKKLANQNSSRSCG PSEDGVPRTARSMSLTMGKNMP
 RRRVSVAVVPKFNALNLPQAPSSSPMPSLPAL SESTNGRSSISTSPVLPALLENGKTNAEANCEVCAPV
 PLPSYPEETSQEAKARAEAAA YNKGYQEGVKKTEELQDLKEEEEEQKAESPQEPEEVEETQEDEKDRSS
 KLEELVHFLQVMYPKLCQHWQVIWMMAAVMLVLSVVLGLYSSYNSCTEQADGPPGRSTCSAAQRDSWWS
 GLQQELPAEQ

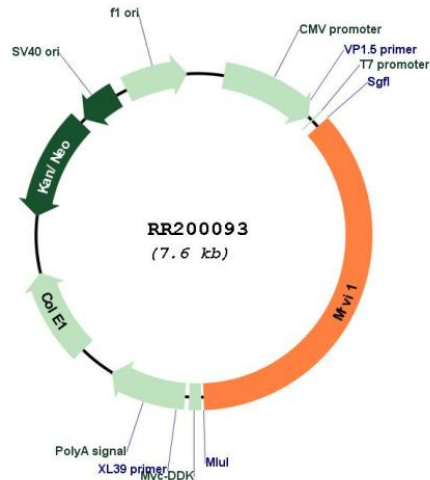
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001105211

ORF Size: 2760 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_001105211.1](#), [NP_001098681.1](#)

RefSeq Size: 5935 bp

RefSeq ORF: 2763 bp

Locus ID: 308899

Cytogenetics: 1q33

MW: 100.2 kDa

Gene Summary:

This gene is similar to a putative mouse tumor suppressor gene 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. Studies in mouse suggest that MRV integration at the homologous mouse gene 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. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Nov 2013]