

Product datasheet for **MG221865**

Irag1 (NM_010826) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Irag1 (NM_010826) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Irag1
Synonyms:	BB115629; Irag; Mrvi1; R; Ris1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG221865 representing NM_010826
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAAAACCAAGAGCTCATCTGTGGCTCTTGGATCCTGGAAATGGAACCCAGTTTGGGACAGGGATGG
 GAAGGAGTTTGACTTGTCTTTTGGCATCTCCCCAGCCTGCGGAGCCCAAGCCTCTTGGAGCATCTTTGG
 GTTGGCACAGCAGAGGTTCCAGGCACGCACAGCCACTCCAACCAGGCGGCTGCCATGCCCCACATTCTCT
 GAGGATGAGGAGCCCCCGGAGAGCCACAGGCAGCCAGACCCAAGACTCTCCCTCTGCAGGACCATTTTC
 CCAGCCCTCCCACAATCGTCTGACGGGGATGCCAGTTCACCTGAAGGAGAGACTGACAAAAACCTAGT
 CAACAGGGCTCCCAGCCCTACCGGAGGCTTTCCACCGACACCTGAAGGTCTCCACTGCTTCGCTGACT
 TCTGTGGACCCCTCGGGCATGTATTGACCTGGTGAATGACCAGCTGCCGGACATCAGCATCTCAGAAG
 AGGACAAGAAAAAACCTGGCACTTCTGGAAGAAGCCAAGTTGGTGAGTGAGCGGTTCTGACCCGCCG
 TGGGAGGAAATCAAGGAGCAGCCTCGGAGACTCCCATCAGCTGTTTCTCAAACCTCAGCTCTGGGGCT
 TCTCTGCATCCTCCAGGAGCTGCTCCCTACCATCTCCACATCACCAGGTTTGGACATATGCAGTGGCC
 CTCAGTCCCCTCTGCCAGGAGCACCACCACAGCAAAAGGGACATGAGGACGGGGTCTCCTCGCCTTGCCC
 CGGAGAGCCTAATGTCTCAAAGGGCTAGCTGACCTGAAGCAGAAATGACCAGAGAAAAGTGTCTCAAGGC
 AGACTGGCTCCTCGCTCTCCACAGTGGAGAAAACCAAGGAACCTACAGTAGAACAAAAGGAAAACCTTTG
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 TCTGAACAGCCCCAGCCTGGCCCTGCTGAGATGGAGCTGGGGAGGCAGCTCTGAAGACAGCCCGGAA
 GGCAACCTCTGCCAGAACCACAGCCAGGGCTCAGGAGGAACGGTCTCCACATTCCCTGGGGCAGG
 GCTCTGCTGGAGAGCCTATGGGACCAAGGCTGGCTCCAAGGCTGAGCTGAGGTCCCTGCTCCCGGCC
 CCCCTGATTTCGGGGGTCTCCTGGGACAGCAGCCCTGAAGAACCAGGTTCCCTGCTGCAGAAGGTGCTC
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 CCTGATGAGAAACCAGAACCTGGTGGGGTTCAAGCTCCCTGAACTGAGTGAGGCCGCGGAGCAGGACAAA
 GGAGTCTCACCTGAACTCGCCCCAGCAGCTGAGGAAGAAGAGTCCAAGAGTGGTCTGGATGTGATGCCCA
 ACATTTCTGACATATTGCTGCGCAAACCTAGGGTTCACAAGTCACTCACTGGAAGCGCCCTCCACTCAC
 TGAAGGAAAGTTGAGAACGTGTTGTACAAGTGTCTTGGCCTTTAGAAATGACAGCTACACCTTGGAG
 TCTAGAATTAACCAGGCTGAAAGGGAGCGCAACCTGACAGAAGAGAACACGGAGAAGGAACTGGAAAAC
 TCAAAGCCTCCATAACGTCTCAGCAAACATCTGGTACCCTGCGAACACCGGGAGACCTATCAGAAACT
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 GTTCGCCAGGAAAAGCGCATGTCAAAGGCCACGGAAGTATGATGCAGTATGTGGAGAATCTGAAGAGAA
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 CCACTCCCAAGCTGTCTGGAGGAGACGAGCCAGGAGACCAAGGCCAAGGCAGAGGAAGAAGCCTACAGCA
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 GAAGACGGAGAGTCCCGAGGAACCAAGAGGTTAGAAGAAACCCAGGAGGACGAGAAGGACCAGGGAAGC
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 TCTGGATGATGGCCGAGTGTGCTTGTGTTGTTCTCGGGCTGTACAGTTCTATAACTCCTG
 CACAGAGGAGGCCGATGGGCCCTGGGAGATCCACCTGCTCTGCAGCCAGCGGACTCCTGGTGGAGC
 TCCGACTCCAGCAAGAGCTGCCAGCAGAGCAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG221865 representing NM_010826
 Red=Cloning site Green=Tags(s)

MQNQRAHLWLLDPGNGTQFGTGMGRSLTCPFGISPACGAQASWSIFGVGTAIEVPGTHSHSNQAAAMPHIP
 EDEPPGEPQAAQTQDPSAGPFPSPPTIVLTGDASSPEGETDKNLVNRAPSPHRRLSHRHLKVSTASLT
 SVDPSGHVIDLVNDQLPDISISEEDKKNLALLEEAKLVSERFLTRRGRKSRSSLDGSPSAVSPNLSGA
 SPASSRSCSLTISTSPGLDICSQSPPLPGAPPQQGHEDGVSSPCGEPNVSKGLADLKQNDQRKVSQG
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 GNPLPRTTAQGGTVSPHSLGQGSAGEPMGPKAGSKAELRSPVSRPPLIRGVSWDSSPEEPGPLLQKVL
 AKLPLAEEEEKRFPGKAKPAKPPGLKDFQIQVQPVVMQKLTCLREEHILMRNQNLVGFKLPELSEAAEQDK
 GVSPELAPAAAAEESKGLDVMPIISDILLRKL RVHKS LTGSAPPLTEKEVENVFVQLSLAFRND SYTLE
 SRINQAERERNLTEENTEKEL ENFKASITSSANIWYHCEHRETYQKLEDI AVLHRLAARLSSRAEVVGA
 VRQEKRM SKATEVMMQYVENLKR TYEKDHAELMEFKKLANQNSSRSCG SEDGVPRTARMSLTMGKNMP
 RRRVSVAVVPKFNALNLPQAPSSSPMPSLPALSESSNGKSSISVSPALPALLENGKTNAEANCEV GAPV
 PLPSCLEETSQETKAKAE EEA YSKGYQEGVKKTEELQDLKEEEEEEQKTESPEEPEEVEETQEDEK DQGS
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 SGLQQELPAEQ

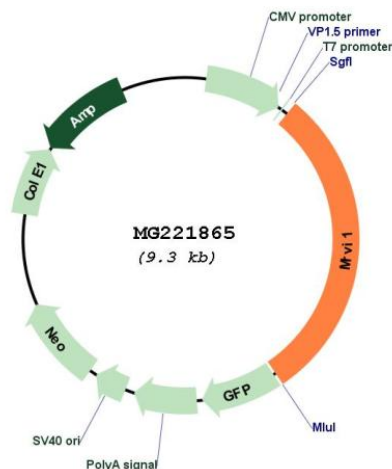
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_010826

ORF Size: 2763 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_010826.5](#), [NP_034956.2](#)

RefSeq Size: 5958 bp

RefSeq ORF: 2766 bp

Locus ID: 17540

Cytogenetics: 7 57.9 cM

Gene Summary:

This gene is a putative tumor suppressor gene that is frequently disrupted by mouse AIDS-related virus (MRV). The encoded protein participates in signaling by nitric oxide (NO) to inhibit intracellular calcium release and platelet aggregation in cardiovascular tissue. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2013]