

Product datasheet for **RG221544**

IRAK (IRAK1) (NM_001569) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRAK (IRAK1) (NM_001569) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IRAK
Synonyms:	IRAK; pelle
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221544 representing NM_001569
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCGGGGGGCCGGGGCCGGGGGAGCCCGAGCCCCGGCGCCAGCACTTCTTGACGAGGTGCCGC
 CCTGGGTGATGTGCCGCTTCTACAAAGTATGGACGCCCTGGAGCCCGCGACTGGTGCCAGTTCGCCGC
 CCTGATCGTGCGCGACCAGACCGAGCTGCGGCTGTGCGAGCGCTCCGGGAGCGCACGGCCAGCGTCTG
 TGGCCTGGATCAACCGCAACGCCCGTGTGGCCGACCTCGTGCACATCCTCACGCACCTGCAGTCTCC
 GTGCGCGGGACATCATCACAGCCTGGCACCCCTCCCGCCCCGCTTCCGTCCCAGGACCAGTCCCCGAG
 GCCAGCAGCATCCCTGCACCCCGGAGGCCGAGGCTGGAGCCCCGGAAGTTCGCATCCTCAGCCTCC
 ACCTTCTCTCCCAGCTTTTCCAGGCTCCAGACCCATTAGGGCTGAGCTCGCCTGGTTCCAAGCC
 CTGCTTCCCTGTGGCCTCCACCGCCATCCTCAGCCCTTCTTCTACCAAGCCAGGCCAGAGAGCTCAGT
 GTCCTCTGCAGGGAGCCGCCCTCTCCGTTTTGCTGGCCCTCTGTGAGATTTCCCGGGCACCCAC
 AACTTCTCGGAGGAGCTCAAGATCGGGGAGGGTGGCTTTGGGTGCGTGTACCGGGCGGTGATGAGGAACA
 CGGTGTATGCTGTGAAGAGGCTGAAGGAGAACGCTGACCTGGAGTGGACTGCAGTGAAGCAGAGTTCCT
 GACCGAGGTGGAGCAGCTGTCCAGTTTTCGTACCCAAACATTGTGGACTTTGCTGGTACTGTGCTCAG
 AACGGCTTCTACTGCCTGGTGTACGGCTTCTGCCAACGGCTCCCTGGAGGACCGTCTCCACTGCCAGA
 CCCAGGCTGCCACCTCTCTCTGGCCTCAGCGACTGGACATCCTTCTGGGTACAGCCCGGCAATTCA
 GTTTCTACATCAGGACAGCCCCAGCCTCATCCATGGAGACATCAAGAGTTC AACGTCCTTCTGGATGAG
 AGGCTGACACCAAGCTGGGAGACTTTGGCCTGGCCCGTTT CAGCCGTTTCCCGGTCCAGCCCCAGCC
 AGAGCAGCATGGTGGCCCGGACACAGACAGTGCGGGGCACCTGGCCTACCTGCCGAGGAGTACATCAA
 GACGGGAAGGCTGGCTGTGGACACGGACACCTTCAGCTTTGGGGTGGTAGTGCTAGAGACCTTGGCTGGT
 CAGAGGGCTGTGAAGACGCACGGTGCCAGGACCAAGTATCTGAAAGACCTGGTGAAGAGGAGGCTGAGG
 AGGCTGGAGTGGCTTTGAGAAGCACCCAGAGCACACTGCAAGCAGGTCTGGCTGCAGATGCCTGGCTGC
 TCCCATCGCCATGCAGATCTACAAGAAGCGCCTGGGCCAGCTGGCCTGCTGCTGCCTGCACCGCCGGCC
 AAAAGGAGGCTCCTATGACCCAGGTGTACGAGAGGCTAGAGAAGCTGCAGGCAGTGGTGGCGGGGTGC
 CCGGGCATTGGAGGCCGCCAGCTGCATCCCCCTTCCCCGAGGAGAACTCCTACGTGTCAGCACTGG
 CAGAGCCACAGTGGGGCTGCTCCATGGCAGCCCTGGCAGGCCATCAGGAGCCAGTCCCAGGCAGCA
 GAGCAGCTGCAGAGAGGCCCAACCAGCCCGTGGAGAGTGACGAGAGCCTAGGCGCCTCTCTGCTGCC
 TGCCTCCTGGCACTTACTCCAAGCTGCCCTTGGACCCAGCACCCCTCAGGGAGGCCGCTGTCTCA
 GGGGACACGGCAGGAGAATCGAGCTGGGGGAGTGGCCAGGATCCCGGCCACAGCCGTGGAAGGACTG
 GCCCTTGGCAGCTCTGCATCATCGTCGTGAGAGCCACCGCAGATTATCATCAACCCTGCCGACAGAAGA
 TGGTCCAGAAGCTGGCCCTGTACGAGGATGGGGCCCTGGACAGCCTGCAGCTGCTGCTGTCAGCTCCCT
 CCCAGGCTTGGGCTGGAACAGGACAGGCAGGGGCCGAAGAAAGTATGAATTCAGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221544 representing NM_001569
 Red=Cloning site Green=Tags(s)

MAGGPGPGEPAAPGAQHFLYEVPWVMCRFYKVMDALEPADWCQFAALIVRDQTELRCLCERSGQRTASVL
 WPWINRNARVADLVHILTHLQLLRARDIITAWHPPAPLPSPGTTAPRPSSIPAPAEAEAWSRKLPSAS
 TFLSPAFPGSQTHSGPELGLVSPASLWPPPPSPAPSSTKPGPESSVLLQGARPSPFCWPLCEISRGT
 NFSEELKIGEGGFGCVYRAVMRNTVYAVKRLKENADLEWTAVKQSFLTEVEQLSRFRHPNI VDFAGYCAQ
 NGFYCLVYGFPLNGSLEDRLHCQTQACPLSWPQRLDILLGTARAIQFLHQDSPSLIHGDIKSSNVLLDE
 RLTPKLGDFGLARFSRFAGSSPSQSSMVARTQTVRGTLAYLPEEYIKTGR LAVD TDTFSFGVVVLETLAG
 QRAVKTHGARTKYLKDLVEEEAEAGVALRSTQSTLQAGLAADAWAAPIAMQIYKRLGQLACCLHRRRA
 KRRPPMTQVYERLEKLQAVVAGVPGHLEAASCIPPSPQENSYVSSTGRAHSGAAPWQPLAAPSGASAQAA
 EQLQRGNQPVESDESLGGLSAALRSWHLTPSCPLDPAPLREAGCPQGD TAGESSWGS GPGSRPTAVEGL
 ALGSSASSSEPPQIIINPARQKMQKLALYEDGALDSLQLLSSSSLPGLGLEQDRQGPEESDEFQS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001569

ORF Size: 2091 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_001569.3](#), [NP_001560.2](#)

RefSeq Size: 3589 bp

RefSeq ORF: 2139 bp

Locus ID: 3654

UniProt ID: [P51617](#)

Cytogenetics: Xq28

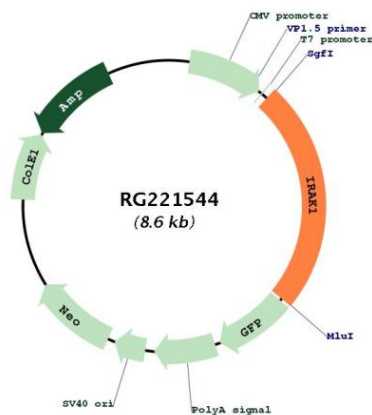
Domains: DEATH, pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase, Transcription Factors

Protein Pathways: Apoptosis, Neurotrophin signaling pathway, Toll-like receptor signaling pathway

Gene Summary: This gene encodes the interleukin-1 receptor-associated kinase 1, one of two putative serine/threonine kinases that become associated with the interleukin-1 receptor (IL1R) upon stimulation. This gene is partially responsible for IL1-induced upregulation of the transcription factor NF-kappa B. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG221544