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Product datasheet for RC221544

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:	Myc-DDK
Symbol:	IRAK
Synonyms:	IRAK; pelle
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC221544 representing NM_001569
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGGGGGGCCGGGCCCGGGGGAGCCCGCAGCCCCCGGCGCCCAGCACTTCTTGTACGAGGTGCCGC
CCTGGGTCATGTGCCGCTTCTACAAAGTGATGGACGCCCTGGAGCCCGCCGACTGGTGCCAGTTCGCCGC
CCTGATCGTGCGCGACCAGACCGAGCTGCGGCTGTGCGAGCGCTCCGGGCAGCGCACGGCCAGCGTCCTG
TGGCCCTGGATCAACCGCAACGCCCGTGTGGCCGACCTCGTGCACATCCTCACGCACCTGCAGCTGCTCC
GTGCGCGGGACATCATCACAGCCTGGCACCCTCCCGCCCCGCTTCCGTCCCCAGGCACCACTGCCCCGAG
GCCCAGCAGCATCCCTGCACCCGCCGAGGCCGAGGCCTGGAGCCCCCGGAAGTTGCCATCCTCAGCCTCC
ACCTTCCTCTCCCCAGCTTTTCCAGGCTCCCAGACCCATTCAGGGCCTGAGCTCGGCCTGGTTCCAAGCC
CTGCTTCCCTGTGGCCTCCACCGCCATCTCCAGCCCCTTCTTCTACCAAGCCAGGCCCAGAGAGCTCAGT
GTCCCTCCTGCAGGGAGCCCGCCCCTCTCCGTTTTGCTGGCCCCTCTGTGAGATTTCCCGGGGCACCCAC
AACTTCTCGGAGGAGCTCAAGATCGGGGAGGGTGGCTTTGGGTGCGTGTACCGGGCGGTGATGAGGAACA
CGGTGTATGCTGTGAAGAGGCTGAAGGAGAACGCTGACCTGGAGTGGACTGCAGTGAAGCAGAGCTTCCT
GACCGAGGTGGAGCAGCTGTCCAGGTTTCGTCACCCAAACATTGTGGACTTTGCTGGCTACTGTGCTCAG
AACGGCTTCTACTGCCTGGTGTACGGCTTCCTGCCCAACGGCTCCCTGGAGGACCGTCTCCACTGCCAGA
CCCAGGCCTGCCCACCTCTCTCCTGGCCTCAGCGACTGGACATCCTTCTGGGTACAGCCCGGGCAATTCA
GTTTCTACATCAGGACAGCCCCAGCCTCATCCATGGAGACATCAAGAGTTCCAACGTCCTTCTGGATGAG
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AGAGCAGCATGGTGGCCCGGACACAGACAGTGCGGGGCACCCTGGCCTACCTGCCCGAGGAGTACATCAA
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TGTACGAGAGGCTAGAGAAGCTGCAGGCAGTGGTGGCGGGGGTGCCCGGGCATTTGGAGGCCGCCAGCTG
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CTGCCCTCTGGACCCAGCACCCCTCAGGGAGGCCGGCTGTCCTCAGGGGGACACGGCAGGAGAATCGAGC
TGGGGGAGTGGCCCAGGATCCCGGCCCACAGCCGTGGAAGGACTGGCCCTTGGCAGCTCTGCATCATCGT
CGTCAGAGCCACCGCAGATTATCATCAACCCTGCCCGACAGAAGATGGTCCAAAAGCTGGCCCTGTACGA
GGATGGGGCCCTGGACAGCCTGCAGCTGCTGTCGTCCAGCTCCCTCCCAGGCTTGGGCCTGGAACAGGAC
AGGCAGGGGCCCGAAGAAAGTGATGAATTTCAGAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221544 representing NM_001569
Red=Cloning site Green=Tags(s)

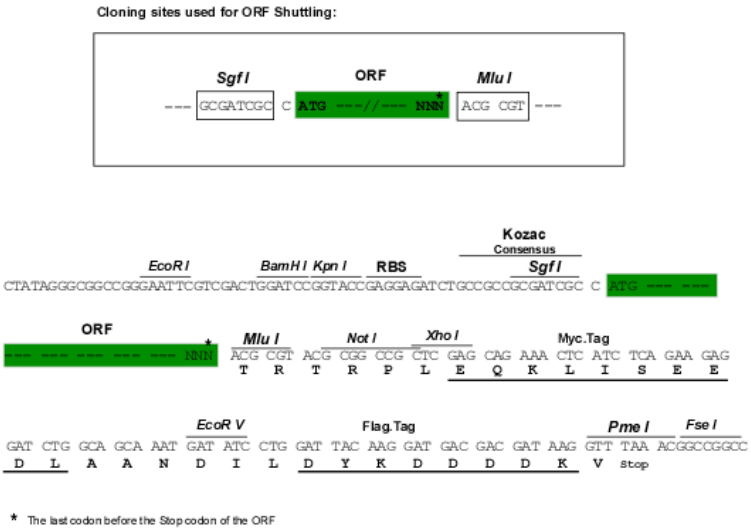
MAGGPGPGEPAAPGAQHFLYEVPPWVMCRFYKVMDALEPADWCQFAALIVRDQTELRLCERSGQRTASVL
WPWINRNARVADLVHILTHLQLLRARDIITAWHPPAPLPSPGTTAPRPSSIPAPAEAEAWSPRKLPSSAS
TFLSPAFPGSQTHSGPELGLVPSPASLWPPPPSPAPSSTKPGPESSVSLLQGARPSPFCWPLCEISRGTH
NFSEELKIGEGGFGCVYRAVMRNTVYAVKRLKENADLEWTAVKQSFLTEVEQLSRFRHPNIVDFAGYCAQ
NGFYCLVYGFLPNGSLEDRLHCQTQACPPLSWPQRLDILLGTARAIQFLHQDSPSLIHGDIKSSNVLLDE
RLTPKLGDFGLARFSRFAGSSPSQSSMVARTQTVRGTLAYLPEEYIKTGRLAVDTDTFSFGVVVLETLAG
QRAVKTHGARTKYLKDLVEEEAEEAGVALRSTQSTLQAGLAADAWAAPIAMQIYKKHLDPRPGPCPPELG
LGLGQLACCCLHRRAKRRPPMTQVYERLEKLQAVVAGVPGHLEAASCIPPSPQENSYVSSTGRAHSGAAP
WQPLAAPSGASAQAAEQLQRGPNQPVESDESLGGLSAALRSWHLTPSCPLDPAPLREAGCPQGDTAGESS
WGSGPGSRPTAVEGLALGSSASSSSEPPQIIINPARQKMVQKLALYEDGALDSLQLLSSSSLPGLGLEQD
RQGPEESDEFQS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3276_h05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001569

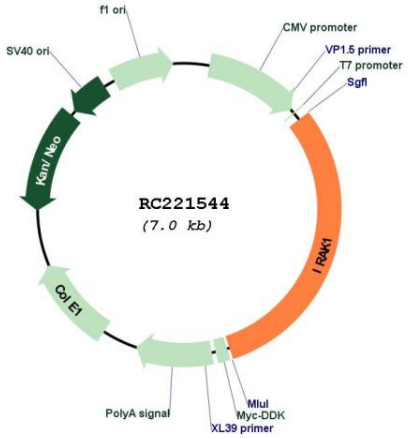
ORF Size: 2136 bp

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

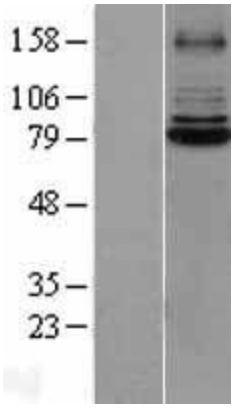
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001569.4
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
MW:	76.4 kDa
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 RC221544



Western blot validation of overexpression lysate (Cat# [LY400603]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221544 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).