

Product datasheet for **RC224107**

IRAK (IRAK1) (NM_001025242) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRAK (IRAK1) (NM_001025242) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC224107 representing NM_001025242
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCGGGGGGCCGGGCCGGGGGAGCCCGAGCCCCGGCGCCAGCACTTCTTGACGAGGTGCCGC
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 GCCAGCAGCATCCCTGCACCCCGGAGGCCGAGGCTGGAGCCCCGGAAGTTCGCATCCTCAGCCTCC
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 CTGCTTCCCTGTGGCCTCCACCGCCATCCTCAGCCCTTCTTCTACCAAGCCAGGCCAGAGAGCTCAGT
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 ATCATCAACCCTGCCGACAGAAGATGGTCCAGAAGCTGGCCCTGTACGAGGATGGGGCCCTGGACAGCC
 TGCAGTGTGTCGTCAGCTCCCTCCCAGGCTTGGCCCTGGAACAGGACAGGCAGGGGCCCGAAGAAAG
 TGATGAATTCAGAGC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC224107 representing NM_001025242
 Red=Cloning site Green=Tags(s)

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MAGGPGPGPEAAPGAQHFLYEVPWVMCRFYKVMDALEPADWCQFAALIVRDQTELRLCERSGQRTASVL
WPWINRNARVADLVHILTHLQLLRARDIITAWHPPAPLPSGTTAPRPSSIPAPAEAEAWSRKLPPSSAS
TFLSPAFFPGSQTHSGPELGLVPSASLWPPPPSPAPSSTKPGPESSVLLQGARPSPFCWPLCEISRGT
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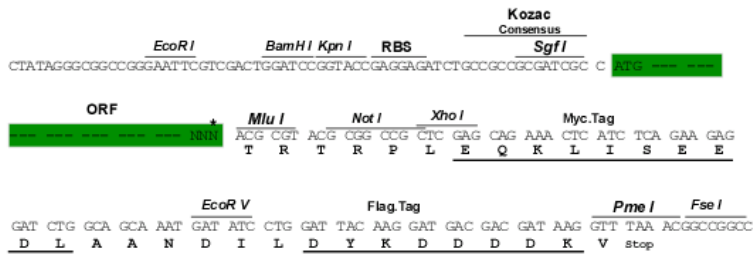
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4203_c04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



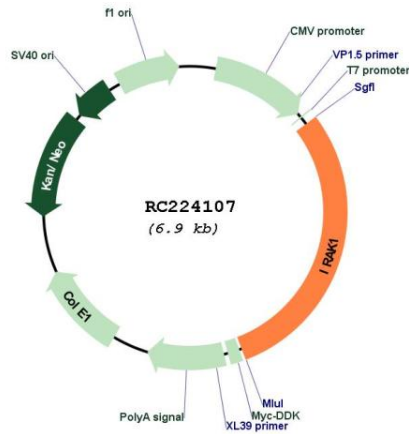
* The last codon before the Stop codon of the ORF

ACCN: NM_001025242

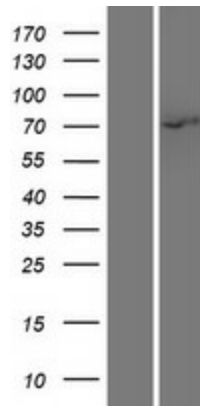
ORF Size: 2046 bp

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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_001025242.1 , NP_001020413.1
RefSeq Size:	3499 bp
RefSeq ORF:	2049 bp
Locus ID:	3654
UniProt ID:	P51617
Cytogenetics:	Xq28
Protein Families:	Druggable Genome, Protein Kinase, Transcription Factors
Protein Pathways:	Apoptosis, Neurotrophin signaling pathway, Toll-like receptor signaling pathway
MW:	73.2 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 RC224107



Western blot validation of overexpression lysate (Cat# [LY422494]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224107 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).