

Product datasheet for **RC227352**

IRAK4 (NM_001145257) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRAK4 (NM_001145257) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IRAK4
Synonyms:	IMD67; IPD1; IRAK-4; NY-REN-64; REN64
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC227352 representing NM_001145257
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACTAATTAGGAAGCTGTCAG
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 GCAGTGAAGAAGCTTGCAGCAATGGTTGACACTACTGAAGAAGTAAACAGCAGTTTGTCAAGAAA
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 CCTCTGCTTAGTATATGTTTACATGCCTAATGGTTCATTGCTAGACAGACTCTCTTGGTGGATGGTACT
 CCACCCTTTCTTGGCACATGAGATGCAAGATTGCTCAGGGTGCAGCTAATGGCATCAATTTTCTACATG
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 ACAACAGCTTATATGGCACCAGAAGCTTTGCGTGGAGAAAATAACCCAAATCTGATATTTACAGCTTTG
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 GCTGATCCACTTCAGTTGAAGCTATGACTCTGTTGCTAGTCAATGCTGTCATGAAAAGAAAAATAAGA
 GACCAGACATTAAGAAGTTCAACAGCTGCTGCAAGAGATGACAGCTTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227352 representing NM_001145257
 Red=Cloning site Green=Tags(s)

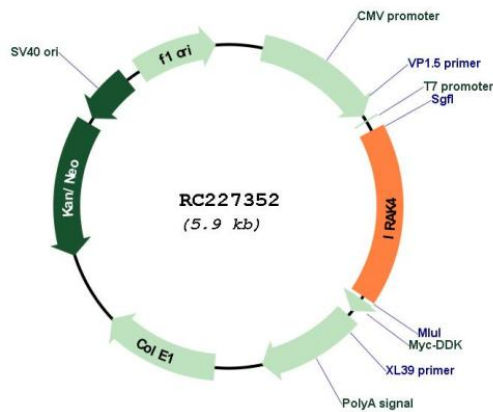
MNKPIPTSTYVRCLNVGLIRKLSDFIDPQEGWKKLAVAIKKPSGDDRYNQFHIRRFEALLQTGKSPTSEL
 LFDWGTNCTVGDLDVLLIQNEFFAPASLLLPDAVPKTANTLPSKEAITVQKQMPFCDKDRTLMPVQN
 LEQSYMPPDSSSPENKSLEVSDFRHSFSFYELKNVTNNFDERPISVGGNKMGGGGFVVYKGYVNNNTV
 AVKLAAMVDITTEELKQFDQEIKVMACQHENLVELLGFSSDGDCLVYVYMPNGSLLDRLSCLDGT
 PPLSWHMRCKIAQGAANGINFLHENHHIHRDIKSANILLDEAFTAKISDFGLARASEKFAQTVMTSRIVG
 TTAYMAPEALRGEITPKSDIYSFGVLLLEIITGLPAVDEHREPQLLLLDIKEEIEDEEKTIEDYIDKKMND
 ADSTSVEAMYSVASQCLHEKKNRPDIKKVQQLQEMTAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:

ACCN:

NM_001145257

ORF Size:

1383 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:	<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_001145257.1 , NP_001138729.1
RefSeq Size:	4157 bp
RefSeq ORF:	1011 bp
Locus ID:	51135
UniProt ID:	Q9NWZ3
Cytogenetics:	12q12
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Apoptosis, Neurotrophin signaling pathway, Toll-like receptor signaling pathway
MW:	51.5 kDa
Gene Summary:	This gene encodes a kinase that activates NF-kappaB in both the Toll-like receptor (TLR) and T-cell receptor (TCR) signaling pathways. The protein is essential for most innate immune responses. Mutations in this gene result in IRAK4 deficiency and recurrent invasive pneumococcal disease. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]