

Product datasheet for **RC203041**

IRAK4 (NM_016123) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRAK4 (NM_016123) 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:

>RC203041 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACTAATTAGGAAGCTGTCAG
 ATTTTATTGATCCTCAAGAAGGATGGAAGAAGTTAGCTGTAGCTATTAACCAACCTCTGGTGTATAG
 ATACAATCAGTTTACATAAAGGAGATTTGAAGCATTACTTCAAACCTGGAAAAAGTCCCACTTCTGAATTA
 CTGTTTACTGGGGCACCACAAATTGCACAGTTGGTGTCTTGTGGATCTTTTGTCCAAAATGAATTTT
 TTGCTCCTGCAAGTCTTTTGTCCAGATGCTGTTCCAAAACCTGCTAATACTACCTTCTAAAGAAGC
 TATAACAGTTTCAACAAAACAGATGCCTTTCTGTGACAAAGACAGGACATTGATGACACCTGTGCAGAA
 CTTGAACAAAGCTATATGCCACCTGACTCCTCAAGTCCAGAAAAAAAAGTTTGAAGTTAGTGATACAC
 GTTTTACAGTTTTTTCATTTTATGAATTGAAGAATGTCACAAAATACTTTGATGAACGCCATTCTGT
 TGGTGGTAATAAAATGGGAGAGGGAGGATTTGGAGTTGTATATAAAGGCTACGTAATAACACAACCTGTG
 GCAGTGAAGAAGCTTGCAGCAATGGTTGACACTACTGAAGAAGTAAACAGCAGTTTGTCAAGAAA
 TAAAAGTAATGGCAAAGTGTCAACATGAAAACCTAGTAGAACTACTTGGTTTCTCAAGTGTGGAGATGA
 CCTCTGCTTAGTATATGTTTACATGCCTAATGGTTCATTGCTAGACAGACTCTCTTGGTGGATGGTACT
 CCACCCTTTCTTGGCACATGAGATGCAAGATTGCTCAGGGTGCAGCTAATGGCATCAATTTTCTACATG
 AAAATCATCATATTCATAGAGATATTAAGAGTGAACATATCTTACTGGATGAAGCTTTTACTGCTAAAAT
 ATCTGACTTTGGCCTTGCACGGGCTTCTGAGAAGTTGCCAGACAGTCTGACTAGCAGAATTGTGGGA
 ACAACAGCTTATATGGCACCAGAAGCTTTCGCTGGAGAAAATAACCCAAATCTGATATTTACAGCTTTG
 GTGTGGTTTTACTAGAAAATAAATACTGGACTTCCAGCTGTGGATGAACCCGTTCAACCTCAGTTATTGCT
 AGATATTAAGAAGAAAATTGAAGATGAAGAAAAGACAATTGAAGATTATATTGATAAAAAGATGAATGAT
 GCTGATCCACTTCAGTTGAAGCTATGACTCTGTTGCTAGTCAATGCTGCTGCATGAAAAGAAAAATAAGA
 GACCAGACATTAAGAAGTTCAACAGCTGCTGCAAGAGATGACAGCTTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203041 protein sequence
 Red=Cloning site Green=Tags(s)

MNKPIPTSTYVRCLNVGLIRKLSDFIDPQEGWKKLAVAIKKPSGDDRYNQFHIRRFEALLQTGKSPTSEL
 LFDWGTNCTVGDLDVLLIQNEFFAPASLLLPDAVPKANTLPSKEAITVQKQMPFCDKDRTLMPVQN
 LEQSYMPPDSSSPENKSLEVSDFRHSFSFYELKNVTNNFDERPISVGGNKMGGGFGVVYKGYVNNNTV
 AVKLAAMVDITTEELKQFDQEIKVMACQHENLVELLGFSSDGDLDCLVYVYMPNGSLLDRLSCLDGT
 PPLSWHMRCKIAQGAANGINFLHENHHIHRDIKSANILLDEAFTAKISDFGLARASEKFAQTVMTSRIVG
 TTAYMAPEALRGEITPKSDIYSFGVLLLEIITGLPAVDEHREPQLLLLDIKEEIEDEEKTIEDYIDKKMND
 ADSTSVEAMYSVASQCLHEKKNRPDIKKVQQLQEMTAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6155_b05.zip

Restriction Sites:

Sgfl-Mlul

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_016123.4](#)

RefSeq Size: 4303 bp

RefSeq ORF: 1383 bp

Locus ID: 51135

UniProt ID: [Q9NWZ3](#)

Cytogenetics: 12q12

Domains: DEATH, pkinase, TyrKc, S_TKc

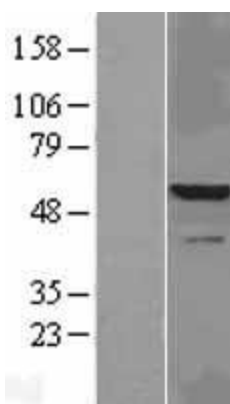
Protein Families: Druggable Genome, Protein Kinase

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

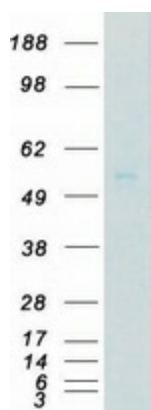
MW: 51.5 kDa

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]

Product images:



Western blot validation of overexpression lysate (Cat# [LY426473]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225772] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IRAK4 protein (Cat# [TP303041]). The protein was produced from HEK293T cells transfected with IRAK4 cDNA clone (Cat# RC203041) using MegaTran 2.0 (Cat# [TT210002]).