

Product datasheet for **SC323327**

IRAK4 (NM_016123) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRAK4 (NM_016123) Human Untagged Clone
Tag:	Tag Free
Symbol:	IRAK4
Synonyms:	IMD67; IPD1; IRAK-4; NY-REN-64; REN64
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_016123, the custom clone sequence may differ by one or more nucleotides

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ATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACTAATTAGGAAGCTGTCAG
ATTTTATTGATCCTCAAGAAGGATGGAAGAAGTTAGCTGTAGCTATTAACCAACCTGGTGATGATAG
ATACAATCAGTTTCACATAAGGAGATTTGAAGCATTACTTCAAAGTGGAAAAAGTCCCACTTCTGAATTA
CTGTTTGACTGGGGCACCACAAATTGCACAGTTGGTGATCTTGTGGATCTTTGATCCAAAATGAATTTT
TTGCTCCTGCGAGTCTTTTGTCCAGATGCTGTTCCCAAAGTCTAATACACTACCTTCTAAAGAAGC
TATAACAGTTTACAAAAACAGATGCCTTCTGTGACAAAAGACAGGACATTGATGACACCTGTGCAGAAT
CTTGAACAAAGCTATATGCCACCTGACTCCTCAAGTCCAGAAAAATAAAGTTTAGAAGTTAGTGATACAC
GTTTTACAGTTTTTTCATTTTATGAATTGAAGAAATGTCACAAATAACTTTGATGAACGACCCATTTCTGT
TGGTGGTAATAAAATGGGAGAGGGAGGATTTGGAGTTGTATATAAAGGCTACGTAATAACACAAGTGTG
GCAGTGAAGAAGCTTGCAGCAATGGTTGACATTACTACTGAAGAAGTGAACAGCAGTTTGTCAAGAAA
TAAAGTAAATGGCAAAGTGTCAACATGAAAAGTCTAGTAGAACTACTTGGTTTCTCAAGTGATGGAGATGA
CCTCTGCTTAGTATATGTTTACATGCCTAATGGTTCATTGCTAGACAGACTCTCTGCTTGGATGGTACT
CCACCCTTTCTTGGCAGATGAGATGCAAGATTGCTCAGGGTGCAGCTAATGGCACAATTTTCTACATG
AAAATCATCATATTCATAGAGATATTAAGTGAAGTCAATATCTTACTGGATGAAGCTTTTACTGCTAAAAT
ATCTGACTTTGGCCTTGCACGGGCTTCTGAGAAGTTTGGCCAGACAGTCAATGACTAGCAGAAATTTGGGA
ACAACAGCTTATATGGCACCAGAAGCTTTGCGTGGAGAAATAACACCCAAATCTGATATTTACAGCTTTG
GTGTGGTTTTACTAGAAATAAATAACTGGACTTCCAGCTGTGGATGAACACCGTGAACCTCAGTTATTGCT
AGATATTAAGAAGAAATGAAGATGAAGAAAAGACAATTGAAGATTATTTGATAAAAAGATGAATGAT
GCTGATCCACTTCAGTTGAAGCTATGTACTCTGTTGCTAGTCAATGTCTGCATGAAAAGAAAAATAAGA
GACCAGACATTAAGAAGTTCAACAGCTGCTGCAAGAGATGACAGCTTCTTAA
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_016123 unedited CCCGCCGTTGAGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA CCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGCAGCCCGCGCCC GGCAGGAATAGAAGATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACTAAT TAGGAAGCTGTCAGATTTTATTGATCCTCAAGAAGGATGGAAGAAGTTAGCTGTAGCTATTAACCA TCTGGTGATGATAGATAACAATCAGTTTCACATAAGATGCTGTTCCCAAACTGCTAATACACTACCCTTC TAAAAGAAGCTATAACAGTTTCAGCAAAAAACAGATGCCTTTCTGTGACAAAGACAGGACATTGATGACAC CTTGTGCAGATCCTTGACAAAGCTTATGCCACCTGACTCCTCAAGTCCGAAAATAAAAGTTAAAAGTAGT GAACACGTTTCCAGTTTTCCATTTTATGATTTGAGATGGCCAAATTAACTTTGTGAAGGACCATTTTC GGTGGTGATATAAATGGGGAAGGAGGGATTGGATTTGTATAAAGGTCATTATAAACACCGGGGGATGAG AGACTTGCAAAGGGTTGACTTCTCTCGAACTAACACGTTGTTTCGAGATAAGTAGGGAAGGGAAGTGA AACATATAAACTGGTTCTAGTGTGAGAGAGCCTGCTATATAGTACACGCAAGGCATCGGCAGACATCTCG TGGTGGTCTCCACTCTTGCCAGAGCCATGCCAGGACTAAGGACAATTCAGATATCACTCAGATATTGGCA ATTCGGAGCTTTTT
Kinase Domain Sequence:	>SC323327 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation ACGATGMGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGT CAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGCAGCCCGCGCCCGGCA GGAATAGAAGATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACTAATTAGG AAGCTGCAGATTTTATTGATCCTCAAGAAGGATGGAAGAAGTTA
Restriction Sites:	Please inquire
ACCN:	NM_016123
Insert Size:	3000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell, 2008 May p536-548.
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_016123.1 , NP_057207.1
RefSeq Size:	2817 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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2, and 13 all encode the same isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>