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Product datasheet for SC323399

IKK beta (IKBKB) (NM_001556) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IKK beta (IKBKB) (NM_001556) Human Untagged Clone
Tag:	Tag Free
Symbol:	IKK beta
Synonyms:	IKK-beta; IKK2; IKKB; IMD15; IMD15A; IMD15B; NFKBIKB
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001556, the custom clone sequence may differ by one or more nucleotides

ATGAGCTGGTCACCTTCCCTGACAACGCAGACATGTGGGGCCTGGGAAATGAAAGAGCGCCTTGGGACAG
GGGGATTTGGAAATGTCATCCGATGGCACAATCAGGAAACAGGTGAGCAGATTGCCATCAAGCAGTGCCG
GCAGGAGCTCAGCCCCCGGAACCGAGAGCGGTGGTGCCTGGAGATCCAGATCATGAGAAGGCTGACCCAC
CCCAATGTGGTGGCTGCCCGAGATGTCCCTGAGGGGATGCAGAACTTGGCGCCCAATGACCTGCCCCTGC
TGGCCATGGAGTACTGCCAAGGAGGAGATCTCCGGAAGTACCTGAACCAGTTTGAGAACTGCTGTGGTCT
GCGGGAAGGTGCCATCCTCACCTTGCTGAGTGACATTGCCTCTGCGCTTAGATACCTTCATGAAAACAGA
ATCATCCATCGGGATCTAAAGCCAGAAAACATCGTCCTGCAGCAAGGAGAACAGAGGTTAATACACAAAA
TTATTGACCTAGGATATGCCAAGGAGCTGGATCAGGGCAGTCTTTGCACATCATTCGTGGGGACCCTGCA
GTACCTGGCCCCAGAGCTACTGGAGCAGCAGAAGTACACAGTGACCGTCGACTACTGGAGCTTCGGCACC
CTGGCCTTTGAGTGCATCACGGGCTTCCGGCCCTTCCTCCCCAACTGGCAGCCCGTGCAGTGGCATTCAA
AAGTGCGGCAGAAGAGTGAGGTGGACATTGTTGTTAGCGAAGACTTGAATGGAACGGTGAAGTTTTCAAG
CTCTTTACCCTACCCCAATAATCTTAACAGTGTCCTGGCTGAGCGACTGGAGAAGTGGCTGCAACTGATG
CTGATGTGGCACCCCCGACAGAGGGGCACGGATCCCACGTATGGGCCCAATGGCTGCTTCAAGGCCCTGG
ATGACATCTTAAACTTAAAGCTGGTTCATATCTTGAACATGGTCACGGGCACCATCCACACCTACCCTGT
GACAGAGGATGAGAGTCTGCAGAGCTTGAAGGCCAGAATCCAACAGGACACGGGCATCCCAGAGGAGGAC
CAGGAGCTGCTGCAGGAAGCGGGCCTGGCGTTGATCCCCGATAAGCCTGCCACTCAGTGTATTTCAGACG
GCAAGTTAAATGAGGGCCACACATTGGACATGGATCTTGTTTTTCTCTTTGACAACAGTAAAATCACCTA
TGAGACTCAGATCTCCCCACGGCCCCAACCTGAAAGTGTCAGCTGTATCCTTCAAGAGCCCAAGAGGAAT
CTCGCCTTCTTCCAGCTGAGGAAGGTGTGGGGCCAGGTCTGGCACAGCATCCAGACCCTGAAGGAAGATT
GCAACCGGCTGCAGCAGGGACAGCGAGCCGCCATGATGAATCTCCTCCGAAACAACAGCTGCCTCTCCAA
AATGAAGAATTCCATGGCTTCCATGTCTCAGCAGCTCAAGGCCAAGTTGGATTTCTTCAAAACCAGCATC
CAGATTGACCTGGAGAAGTACAGCGAGCAAACCGAGTTTGGGATCACATCAGATAAACTGCTGCTGGCCT
GGAGGGAAATGGAGCAGGCTGTGGAGCTCTGTGGGCGGGAGAACGAAGTGAAACTCCTGGTAGAACGGAT
GATGGCTCTGCAGACCGACATTGTGGACTTACAGAGGAGCCCCATGGGCCGGAAGCAGGGGGGAACGCTG
GACGACCTAGAGGAGCAAGCAAGGGAGCTGTACAGGAGACTAAGGGAAAAACCTCGAGACCAGCGAACTG
AGGGTGACAGTCAGGAAATGGTACGGCTGCTGCTTCAGGCAATTCAGAGCTTCGAGAAGAAAGTGCGAGT
GATCTATACGCAGCTCAGTAAAACTGTGGTTTGCAAGCAGAAGGCGCTGGAACTGTTGCCCAAGGTGGAA
GAGGTGGTGAGCTTAATGAATGAGGATGAGAAGACTGTTGTCCGGCTGCAGGAGAAGCGGCAGAAGGAGC
TCTGGAATCTCCTGAAGATTGCTTGTAGCAAGGTCCGTGGTCCTGTCAGTGGAAGCCCGGATAGCATGAA
TGCCTCTCGACTTAGCCAGCCTGGGCAGCTGATGTCTCAGCCCTCCACGGCCTCCAACAGCTTACCTGAG
CCAGCCAAGAAGAGTGAAGAACTGGTGGCTGAAGCACATAACCTCTGCACCCTGCTAGAAAATGCCATAC
AGGACACTGTGAGGGAACAAGACCAGAGTTTCACGGCCCTAGACTGGAGCTGGTTACAGACGGAAGAAGA
AGAGCACAGCTGCCTGGAGCAGGCCTCATGA

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_001556 unedited
CCCGCCCGTTGAGCAATGGGCGGTAGGCGTGTACGGAGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA
ACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGGCTGCCCGCGTTA
AGATTCCCGCATTTTAATGTTTTCAGGGGGGTGTCATAGCCCCGGGTTTGGCCGCCCCAGCCCCGCCTTC
CCCGCCCCGGGGAGCCCGCCCCCTGCCCCGCGTCCCTGCCGACAGAGTTAGCACGACATCAGTATGAGCT
GGTCACCTTCCCTGACAACGCAGACATGTGGGGCCTGGGAATGAAAGAGCGCCTTGGGACAGGGGGATTT
GGAATGGTCATCCCGATGGCCCAATCAGGGAAACAGGTGGACCAGATTGCCTTCAGGCCGGGGCCGGGGG
GGGCCTCACCCCCCGGGAACCCAAAAAGCGGGGGGGGCCTGGAAATCCAAATCATGAAAAAGGCGGACCC
CCCCCAAATGTGGGGGGGCGTGCCAAAAATGCCCCGGAAGGGGGACGCAAAACTTGGGCCCCCAAAGGCC
CTGGCCCGGGGGGGCATGGGTTTCCGGCCAGGGGGGAAAAATCCCCGGAAAATCCCCGAACCCTTTTTAA
AAACCGGTTGGGGGTCCGCGGGAAAGGGCCCCCCCCCCCCTTTGGTGGGGGGAATTTTCCCCTCCCCCCC
TTAAACCCCCTTGAAAAAAAAAAAAATTCCCCCTGGGGTTTTTAAACCCCAAAAAAATTTCCCTCCGGCC
CGGGGGAACAAAAGGGTGTTTAACCCCCAATATTGGGCCCTAGAAATCCCCGAGCTGTGTGTTAGGGGGC
CCTTGCCCCATTACTTGGGGGGGCACCCGCTGAATTGCGGGCCCGAATACATGTGTGAGACCAGAATAAA
TACCAGAGTGCGCCGCAACAGGTGGATCTCTCGCCCCCCGCCTTTTATTTGATTATCTACGCGGTTCTCG
CCTTCTCTCTCTCATGTGCGGCCGCGCGATGGCATGATGTAGA

Kinase Domain Sequence:

>SC323399 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
CSATGMGCAATGGGCGGTAGGCKGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCA
GAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGGCTGCCCGCGTTAAGATTCC
CGCATTTTAATGTTTTCAGGGGGGTGTCATAGCCCCGGGTTTGGCCGCCCCAGCCCCGCCTTCCCCGCCC
CGGGGAGCCCGCCCCCTGCCCCGCGTCCCTGCCGACAGAGTTAGC

Restriction Sites: Please inquire

ACCN: NM_001556

Insert Size: 4500 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:
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_001556.1, NP_001547.1

RefSeq Size:	3916 bp
RefSeq ORF:	2271 bp
Locus ID:	3551
UniProt ID:	O14920
Cytogenetics:	8p11.21
Protein Families:	Druggable Genome, Protein Kinase, Transcription Factors
Protein Pathways:	Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Cytosolic DNA-sensing pathway, Epithelial cell signaling in Helicobacter pylori infection, Insulin signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Pancreatic cancer, Pathways in cancer, Prostate cancer, RIG-I-like receptor signaling pathway, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway, Type II diabetes mellitus
Gene Summary:	The protein encoded by this gene phosphorylates the inhibitor in the inhibitor/NF-kappa-B complex, causing dissociation of the inhibitor and activation of NF-kappa-B. The encoded protein itself is found in a complex of proteins. Several transcript variants, some protein-coding and some not, have been found for this gene. [provided by RefSeq, Sep 2011] Transcript Variant: This variant (1) encodes the longest isoform (1).