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Product datasheet for RC212996

IKK gamma (IKBKG) (NM_001099856) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IKK gamma (IKBKG) (NM_001099856) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IKK gamma
Synonyms:	AMCBX1; EDAID1; FIP-3; FIP3; Fip3p; IKK-gamma; IKKAP1; IKKG; IMD33; IP; IP1; IP2; IPD2; NEMO; ZC2HC9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC212996 representing NM_001099856
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATAGGCACCTCTGGAAGAGCCAACTGTGTGAGATGGTGCAGCCCAGTGGTGGCCCGGCAGCAGATC
AGGACGTACTGGGCGAAGAGTCTCCTCTGGGGAAGCCAGCCATGCTGCACCTGCCTTCAGAACAGGGCGC
TCCTGAGACCCTCCAGCGCTGCCTGGAGGAGAATCAAGAGCTCCGAGATGCCATCCGGCAGAGCAACCAG
ATTCTGCGGGAGCGCTGCGAGGAGCTTCTGCATTTCCAAGCCAGCCAGAGGGAGGAGAAGGAGTTCCTCA
TGTGCAAGTTCCAGGAGGCCAGGAAACTGGTGGAGAGACTCGGCCTGGAGAAGCTCGATCTGAAGAGGCA
GAAGGAGCAGGCTCTGCGGGAGGTGGAGCACCTGAAGAGATGCCAGCAGCAGATGGCTGAGGACAAGGCC
TCTGTGAAAGCCCAGGTGACGTCCTTGCTCGGGGAGCTGCAGGAGAGCCAGAGTCGCTTGGAGGCTGCCA
CTAAGGAATGCCAGGCTCTGGAGGGTCGGGCCCGGGCGGCCAGCGAGCAGGCGCGGCAGCTGGAGAGTGA
GCGCGAGGCGCTGCAGCAGCAGCACAGCGTGCAGGTGGACCAGCTGCGCATGCAGGGCCAGAGCGTGGAG
GCCGCGCTCCGCATGGAGCGCCAGGCCGCCTCGGAGGAGAAGAGGAAGCTGGCCCAGTTGCAGGTGGCCT
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AATGCAGCTGGAAGATCTCAAACAGCAGCTCCAGCAGGCCGAGGAGGCCCTGGTGGCCAAACAGGAGGTG
ATCGATAAGCTGAAGGAGGAGGCCGAGCAGCACAAGATTGTGATGGAGACCGTTCCGGTGCTGAAGGCCC
AGGCGGATATCTACAAGGCGGACTTCCAGGCTGAGAGGCAGGCCCGGGAGAAGCTGGCCGAGAAGAAGGA
GCTCCTGCAGGAGCAGCTGGAGCAGCTGCAGAGGGAGTACAGCAAACTGAAGGCCAGCTGTCAGGAGTCG
GCCAGGATCGAGGACATGAGGAAGCGGCATGTCGAGGTCTCCCAGGCCCCCTTGCCCCCCGCCCCTGCCT
ACCTCTCCTCTCCCCTGGCCCTGCCCAGCCAGAGGAGGAGCCCCCCCGAGGAGCCACCTGACTTCTGCTG
TCCCAAGTGCCAGTATCAGGCCCCTGATATGGACACCCTGCAGATACATGTCATGGAGTGCATTGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212996 representing NM_001099856
Red=Cloning site Green=Tags(s)

MNRHLWKSQLCEMVQPSGGPAADQDVLGEESPLGKPAMLHLPSEQGAPETLQRCLEENQELRDAIRQSNQ
ILRERCEELLHFQASQREEKEFLMCKFQEARKLVERLGLEKLDLKRQKEQALREVEHLKRCQQQMAEDKA
SVKAQVTSLLGELQESQSRLEAATKECQALEGRARAASEQARQLESEREALQQQHSVQVDQLRMQGQSVE
AALRMERQAASEEKRKLAQLQVAYHQLFQEYDNHIKSSVVGSERKRGMQLEDLKQQLQQAEEALVAKQEV
IDKLKEEAEQHKIVMETVPVLKAQADIYKADFQAERQAREKLAEKKELLQEQLEQLQREYSKLKASCQES
ARIEDMRKRHVEVSQAPLPPAPAYLSSPLALPSQRRSPPEEPPDFCCPKCQYQAPDMDTLQIHVMECIE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2642_e01.zip

Restriction Sites: SgfI-MluI

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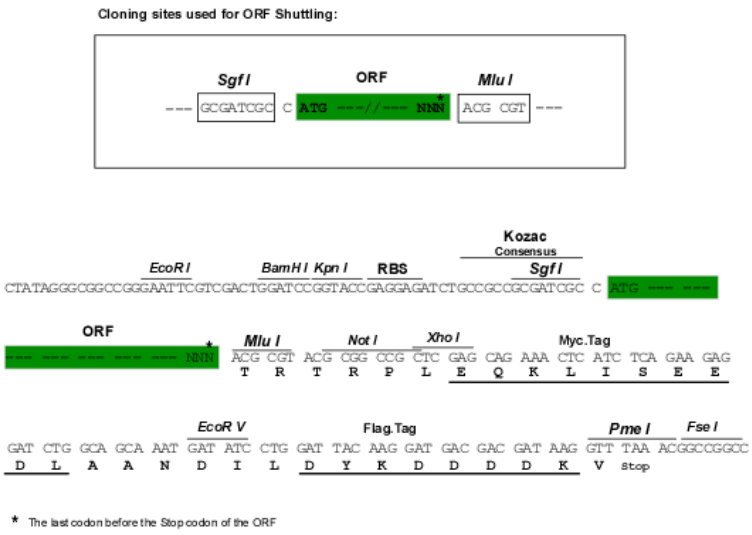
Cloning Scheme:



ACCN: NM_001099856

ORF Size: 1257 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:
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_001099856.1, NP_001093326.1

RefSeq Size: 2073 bp

RefSeq ORF: 1464 bp

Locus ID: 8517

UniProt ID: Q9Y6K9

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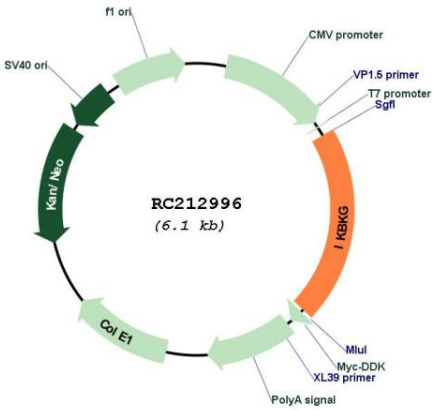
Cytogenetics:	Xq28
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Cytosolic DNA-sensing pathway, Epithelial cell signaling in Helicobacter pylori infection, MAPK signaling pathway, NOD-like receptor signaling pathway, Pancreatic cancer, Pathways in cancer, Primary immunodeficiency, Prostate cancer, RIG-I-like receptor signaling pathway, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway
MW:	48 kDa
Gene Summary:	This gene encodes the regulatory subunit of the inhibitor of kappaB kinase (IKK) complex, which activates NF-kappaB resulting in activation of genes involved in inflammation, immunity, cell survival, and other pathways. Mutations in this gene result in incontinentia pigmenti, hypohidrotic ectodermal dysplasia, and several other types of immunodeficiencies. A pseudogene highly similar to this locus is located in an adjacent region of the X chromosome. [provided by RefSeq, Mar 2016]

Product images:



Circular map for RC212996

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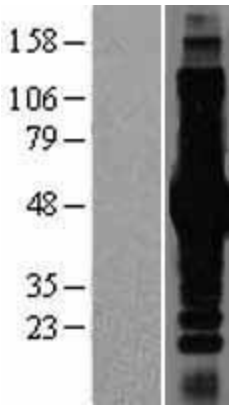
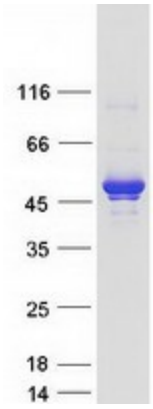


Western blot validation of overexpression lysate (Cat# [LY420210]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC218044] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IKBKG protein (Cat# [TP312996]). The protein was produced from HEK293T cells transfected with IKBKG cDNA clone (Cat# RC212996) using MegaTran 2.0 (Cat# [TT210002]).

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