

Product datasheet for RC218044

OriGene Technologies, Inc.

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IKK gamma (IKBKG) (NM_001099857) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: IKK gamma (IKBKG) (NM_001099857) 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)



ORF Nucleotide Sequence:

>RC218044 representing NM_001099857
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAATAGGCACCTCTGGAAGAGCCAACTGTGTGAGATGGTGCAGCCCAGTGGTGGCCCGGCAGCAGATC TCCTGAGACCCTCCAGCGCTGCCTGGAGGAGAATCAAGAGCTCCGAGATGCCATCCGGCAGAGCAACCAG TGTGCAAGTTCCAGGAGGCCAGGAAACTGGTGGAGAGACTCGGCCTGGAGAAGCTCGATCTGAAGAGGCA GAAGGAGCAGGCTCTGCGGGAGGTGGAGCACCTGAAGAGATGCCAGCAGCAGATGGCTGAGGACAAGGCC TCTGTGAAAGCCCAGGTGACGTCCTTGCTCGGGGAGCTGCAGGAGACCCAGAGTCGCTTGGAGGCTGCCA GCGCGAGGCGCTGCAGCAGCAGCAGCGTGCAGGTGGACCAGCTGCGCATGCAGGGCCAGAGCGTGGAG GCCGCGCTCCGCATGGAGCGCCAGGCCGCCTCGGAGGAGAAGAGGAAGCTGGCCCAGTTGCAGGTGGCCT ATCACCAGCTCTTCCAAGAATACGACAACCACATCAAGAGCAGCGTGGTGGGCAGTGAGCGGAAGCGAGG AATGCAGCTGGAAGATCTCAAACAGCAGCTCCAGCAGGCCGAGGAGGCCCTGGTGGCCAAACAGGAGGTG ATCGATAAGCTGAAGGAGGAGGCCGAGCACAAGATTGTGATGGAGACCGTTCCGGTGCTGAAGGCCC GCTCCTGCAGGAGCAGCTGGAGCAGCTGCAGAGGGAGTACAGCAAACTGAAGGCCAGCTGTCAGGAGTCG ACCTCTCCTCTCCCCTGGCCCTGCCCAGCCAGAGGAGGAGCCCCCCCGAGGAGCCACCTGACTTCTGCTG TCCCAAGTGCCAGTATCAGGCCCCTGATATGGACACCCTGCAGATACATGTCATGGAGTGCATTGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218044 representing NM_001099857 Red=Cloning site Green=Tags(s)

MNRHLWKSQLCEMVQPSGGPAADQDVLGEESPLGKPAMLHLPSEQGAPETLQRCLEENQELRDAIRQSNQ ILRERCEELLHFQASQREEKEFLMCKFQEARKLVERLGLEKLDLKRQKEQALREVEHLKRCQQQMAEDKA SVKAQVTSLLGELQESQSRLEAATKECQALEGRARAASEQARQLESEREALQQQHSVQVDQLRMQGQSVE AALRMERQAASEEKRKLAQLQVAYHQLFQEYDNHIKSSVVGSERKRGMQLEDLKQQLQQAEEALVAKQEV IDKLKEEAEQHKIVMETVPVLKAQADIYKADFQAERQAREKLAEKKELLQEQLEQLQREYSKLKASCQES ARIEDMRKRHVEVSQAPLPPAPAYLSSPLALPSQRRSPPEEPPDFCCPKCQYQAPDMDTLQIHVMECIE

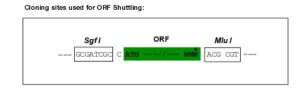
TRTRPLEOKLISEEDLAANDILDYKDDDDKV

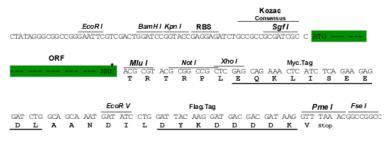
Chromatograms: https://cdn.origene.com/chromatograms/mg2642 e01.zip

Restriction Sites: Sgfl-Mlul



Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001099857

ORF Size: 1257 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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.



Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 001099857.5</u>

 RefSeq Size:
 2279 bp

 RefSeq ORF:
 1260 bp

 Locus ID:
 8517

 UniProt ID:
 Q9Y6K9

 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

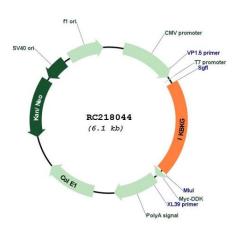
Gene Summary: This gene encodes the regulatory subunit of the inhibitor of kappaB kinase (IKK) complex,

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

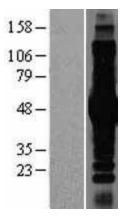
chromosome. [provided by RefSeq, Mar 2016]

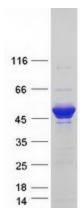
Product images:



Circular map for RC218044







Western blot validation of overexpression lysate (Cat# [LY420210]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected 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# [TP318044]). The protein was produced from HEK293T cells transfected with IKBKG cDNA clone (Cat# RC218044) using MegaTran 2.0 (Cat# [TT210002]).