

Product datasheet for **RC201743**

IKK gamma (IKBKG) (NM_003639) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IKK gamma (IKBKG) (NM_003639) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC201743 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAATAGGCACCTCTGGAAGAGCCAAGTGTGTGAGATGGTGCAGCCAGTGGTGGCCCGCAGCAGATC
 AGGACGTACTGGGCGAAGAGTCTCCTCTGGGGAAGCCAGCCATGCTGCACCTGCCTTCAAGACAGGGCGC
 TCCTGAGACCCTCCAGCGCTGCCTGGAGGAGAATCAAGAGCTCCGAGATGCCATCCGGCAGAGCAACCAG
 ATTCTGCGGGAGCGCTGCGAGGAGCTTCTGCATTTCCAAGCCAGCCAGAGGGAGGAGAAGGAGTTCTCA
 TGTGCAAGTTCCAGGAGGCCAGGAACTGGTGGAGAGACTCGGCCTGGAGAAGCTCGATCTGAAGAGGCA
 GAAGGAGCAGGCTCTGCGGGAGGTGGAGCACCTGAAGAGATGCCAGCAGCAGATGGCTGAGGACAAGGCC
 TCTGTGAAAGCCAGGTGACGTCTTGTCTCGGGAGCTGCAGGAGAGCCAGAGTCGCTTGGAGGCTGCCA
 CTAAAGGAATGCCAGGCTCTGGAGGGTGGGCCCCGGCCAGCAGCAGCGCGCCAGCTGGAGAGTGA
 GCGCGAGGCGCTGCAGCAGCAGCACAGCGTGCAGGTGGACCAGCTGCGCATGCAGGGCCAGAGCGTGGAG
 GCCGCGCTCCGCATGGAGCGCCAGGCCGCTCGGAGGAGAAGAGGAAGCTGGCCAGTTGCAGGTGGCT
 ATCACCAGCTCTTCCAAGAATACGACAACCACATCAAGAGCAGCGTGGTGGGCGAGTGAGCGGAAGCGAGG
 AATGCAGCTGGAAGATCTCAAACAGCAGCTCCAGCAGGCCAGGAGGCCCTGGTGGCCAAACAGGAGGTG
 ATCGATAAGCTGAAGGAGGAGGCCGAGCAGCACAAGATTGTGATGGAGACCGTCCGGTGTGAAGGCC
 AGGCGGATATCTACAAGGCGGACTTCCAGGCTGAGAGGAGGCCCGGGAGAAGCTGGCCGAGAAGAAGGA
 GCTCCTGCAGGAGCAGCTGGAGCAGCTGCAGAGGGAGTACAGCAAACCTGAAGGCCAGCTGTCAAGAGTGC
 GCCAGGATCGAGGACATGAGGAAGCGGCATGTCGAGGTCTCCAGGCCCTTCCCCCCCCCTGCTGCTG
 ACCTCTCTCTCCCCTGGCCCTGCCAGCCAGAGGAGGAGCCCCCCCCGAGGAGCCACCTGACTTCTGCTG
 TCCAAGTGCCAGTATCAGGCCCTGATATGGACACCTGCAGATACATGTCATGGAGTGCATTGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC201743 protein sequence
 Red=Cloning site Green=Tags(s)

MNRHLWKSQ LCEMVQPSGGPAADQDVLGEESPLGKPAMLHLPSEQGAPETLQRCL EENQELRDAIRQSNQ
 ILRERCEELLHFQASQREEKEFLMCKFQEARKLVERLGLEKLDLKRQEQALREVEHLKRCQQQMAEDKA
 SVKAQVTSLLGELQESQSRLEAATKECQALEGRARAASEQARQLESEREALQQQHSVQVDQLRMQGSVE
 AALRMERQAASEEKRLAQLQVAYQLFQEYDNHIKSSVVGSRKRMQL EDLKQQLQQAEEALVAKQEV
 IDKLKEEAQHKIVMETVPVLKAQADIYKADFQAEQAREKLA EKKELLQEQLQQLQREYSK LKASCQES
 ARIEDMRKRHVEVSQAPLPPAPAYLSSPLALPSQRRSPPEEPPDFCCPKCQYQAPMDTLQIHVMECIE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6093_c03.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_003639

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

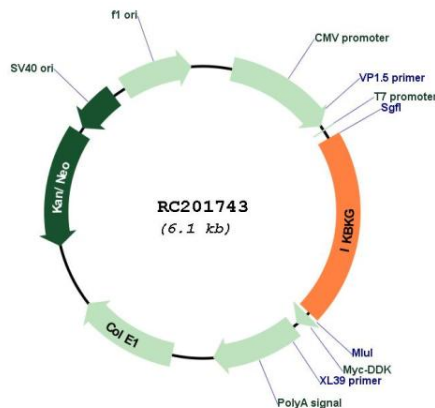
RefSeq: [NM_003639.4](#)
RefSeq Size: 2123 bp

RefSeq ORF: 1260 bp

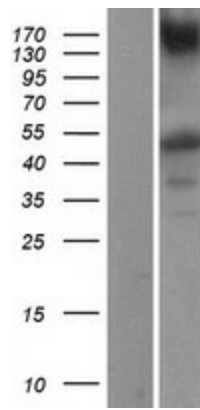
Locus ID: 8517

UniProt ID: [Q9Y6K9](#)
Cytogenetics: Xq28
Domains: zf-C2H2
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: 48.2 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]

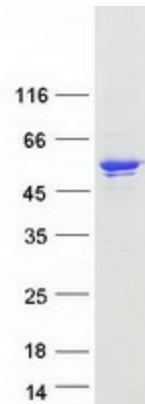
Product images:



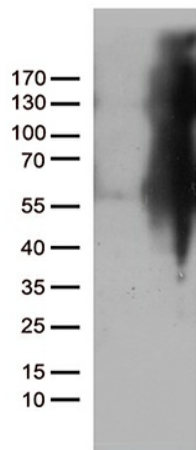
Circular map for RC201743



Western blot validation of overexpression lysate (Cat# [LY401206]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201743 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IKBKG protein (Cat# [TP301743]). The protein was produced from HEK293T cells transfected with IKBKG cDNA clone (Cat# RC201743) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IKBKG (Cat# RC201743, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-IKBKG (Cat# [TA812459])(1:500). Positive lysates [LY401206] (100ug) and [LC401206] (20ug) can be purchased separately from OriGene.