

Product datasheet for **RC216718**

IKK alpha (CHUK) (NM_001278) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | IKK alpha (CHUK) (NM_001278) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | IKK alpha |
| Synonyms: | BPS2; IKBKA; IKK-alpha; IKK1; IKKA; NFKBIKA; TCF16 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide
Sequence:

>RC216718 representing NM_001278
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGAGCGGCCCCCGGGGCTGCGGCCGGCGGGCGGGCCCTGGGAGATGCGGGAGCGGCTGGGCACCG
GCGGCTTCGGGAACGTCTGTCTGTACCAGCATCGGGAACCTTGATCTCAAATAGCAATTAAGTCTTGTCG
CCTAGAGCTAAGTACAAAAACAGAGAACGATGGTGCCATGAAATCCAGATTATGAAGAAGTTGAACCAT
GCCAATGTTGTAAGGCCTGTGATGTTCTGAAGAATTGAATATTTTGATTGATGATGTGCCTCTCTAG
CAATGGAATACTGTTCTGGAGGAGATCTCCGAAAGCTGCTCAACAAACCAGAAAATTGTTGTGGACTTAA
AGAAAGCCAGATACTTTCTTTACTAAGTGATATAGGGTCTGGGATTCGATATTTGCATGAAAACAAAATT
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TCTGGCCCGAGCTCTTTGAGAATAAGCCTTACACAGCCACTGTTGATTATTGGAGCTTTGGGACCATG
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TTAAGAAGAAGGATCAAAGTGTATTTGTCATGTGAAGAGATGTCAGGAGAAGTTCGGTTTAGTAGCCA
TTTACCTCAACCAATAGCCTTTGTAGTTAATAGTAGAACCCATGGAAGTGGCTACAGTTGATGTTG
AATTGGGACCCTCAGCAGAGAGGAGGACCTGTTGACCTTACTTTGAAGCAGCCAAGATGTTTTGTATTAA
TGGATCACATTTTGAATTTGAAGATAGTACACATCCTAAATATGACTTCTGCAAAGATAATTTCTTTTCT
GTTACCACCTGATGAAAGTCTTCATTCACTACAGTCTCGTATTGAGCGTGAAGTGGAAATAACTGGT
TCTCAAGAACTTCTTTGAGAGCAGGAATTTCTCTGGATCCTCGGAAACCAGCCTCTCAATGTGTTCTAG
ATGGAGTTAGAGGCTGTGATAGCTATATGGTTTATTTGTTTGTAAAAGTAAAAGTGTATATGAAGGGCC
ATTTGCTTCCAGAAGTTTATCTGATTGTGTAATTTATATTGTACAGGACAGCAAAATACAGCTTCCAATT
ATACAGCTGCGTAAAGTGTGGGCTGAAGCAGTGCACATATGTGTCTGGACTAAAAGAGACTATAGCAGGC
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CACTTTGATCTCAGCATCACAACAAGTAAAGTAAATTTGGAGTTTTTTCACAAAAGCATTACAGCTTGAC
TTGGAGAGATACAGCGAGCAGATGACGTATGGGATATCTTCAGAAAAATGCTAAAAGCATGGAAGAAA
TGAAGAAAAGGCCATCCACTATGCTGAGGTTGGTGTCTTGGATACCTGGAGGATCAGATTATGTCTTT
GCATGCTGAAATCATGGAGCTACAGAAGAGCCCTATGGAAGACGTCAGGGAGACTTGATGGAATCTCTG
GAACAGCGTGCCATTGATCTATATAAGCAGTTAAAACACAGACCTTCAGATCACTCCTACAGTGACAGCA
CAGAGATGGTGAAAATCATTGTGCACACTGTGCAGAGTCAGGACCGTGTGCTCAAGGAGCTGTTTGGTCA
TTTGAGCAAGTTGTTGGGCTGTAAGCAGAAGATTATTGATCTACTCCCTAAGGTGGAAGTGGCCCTCAGT
AATATCAAAGAAGCTGACAATACTGTATGTTTATGCAGGGAAAAAGGCAGAAAAGAAATATGGCATCTCC
TTAAAATTGCCTGTACACAGAGTTCTGCCCGGTCCCTTGTAGGATCCAGTCTAGAAGGTGCAGTAACCCC
TCAGACATCAGCATGGCTGCCCCGACTTCAGCAGAACATGATCATTCTCTGTATGTGTGGTAACCTCT
CAAGATGGGGAGACTTCAGCACAATGATAGAAGAAAATTTGAACTGCCTGGCCATTTAAGCACTATTA
TTCATGAGGCAAATGAGGAACAGGGCAATAGTATGATGAATCTTGATTGGAGTTGGTTAACAGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216718 representing NM_001278
Red=Cloning site Green=Tags(s)

MERPPGLRPGAGGPWEMRERLTGGFGNVCLYQHRELDLKI A I K S C R L E L S T K N R R W C H E I Q I M K K L N H
 A N V V K A C D V P E E L N I L I H D V P L L A M E Y C S G G D L R K L L N K P E N C C G L K E S Q I L S L L S D I G S G I R Y L H E N K I
 I H R D L K P E N I V L Q D V G G K I I H K I I D L G Y A K D V D Q G S L C T S F V G T L Q Y L A P E L F E N K P Y T A T V D Y W S F G T M
 V F E C I A G Y R L F L H H L Q P F T W H E I K K K D P K C I F A C E E M S G E V R F S S H L P Q P N S L C S L I V E P M E N W L Q L M L
 N W D P Q Q R G G P V D L T L K Q P R C F V L M D H I L N L K I V H I L N M T S A K I I S F L L P P D E S L H S L Q S R I E R E T G I N T G
 S Q E L L S E T G I S L D P R K P A S Q C V L D G V R G C D S Y M V Y L F D K S K T V Y E G P F A S R S L S D C V N Y I V Q D S K I Q L P I
 I Q L R K V W A E A V H Y V S G L K E D Y S R L F Q G Q R A A M L S L L R Y N A N L T K M K N T L I S A S Q Q L K A K L E F F H K S I Q L D
 L E R Y S E Q M T Y G I S S E K M L K A W K E M E E K A I H Y A E V G V I G Y L E D Q I M S L H A E I M E L Q K S P Y G R R Q G D L M E S L
 E Q R A I D L Y K Q L K H R P S D H S Y S D S T E M V K I I V H T V Q S Q D R V L K E L F G H L S K L L G C K Q K I I D L L P K V E A L S
 N I K E A D N T V M F M Q G K R Q K E I W H L L K I A C T Q S S A R S L V G S S L E G A V T P Q T S A W L P P T S A E H D H S L S C V V P T
 Q D G E T S A Q M I E E N L N C L G H L S T I I H E A N E E Q G N S M M N L D W S W L T E

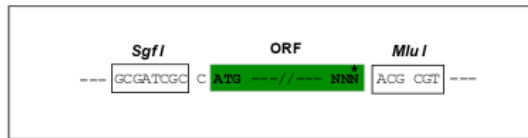
TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2417_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001278

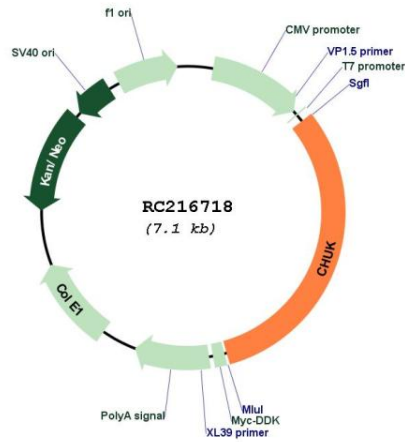
ORF Size: 2235 bp

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](#)

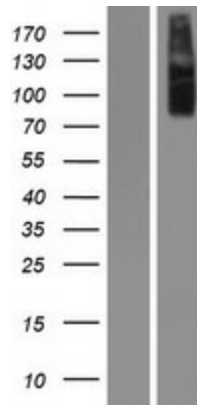
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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| 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_001278.5 |
| RefSeq Size: | 3539 bp |
| RefSeq ORF: | 2238 bp |
| Locus ID: | 1147 |
| UniProt ID: | O15111 |
| Cytogenetics: | 10q24.31 |
| Domains: | pkinase, TyrKc, S_TKc |
| Protein Families: | Druggable Genome, Protein Kinase |
| 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, Prostate cancer, RIG-I-like receptor signaling pathway, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway |
| MW: | 84.5 kDa |
| Gene Summary: | This gene encodes a member of the serine/threonine protein kinase family. The encoded protein, a component of a cytokine-activated protein complex that is an inhibitor of the essential transcription factor NF-kappa-B complex, phosphorylates sites that trigger the degradation of the inhibitor via the ubiquitination pathway, thereby activating the transcription factor. [provided by RefSeq, Jul 2008] |

Product images:



Circular map for RC216718



Western blot validation of overexpression lysate (Cat# [LY400513]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216718 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).