

## Product datasheet for **RC212481**

### **IKBKE (NM\_014002) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	IKBKE (NM_014002) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IKBKE
Synonyms:	IKK-E; IKK-i; IKKE; IKKI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RC212481 representing NM\_014002  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCAGAGCACAGCCAATTACCTGTGGCACACAGATGACCTGCTGGGGCAGGGGGCCACTGCCAGTGTGT  
 ACAAGGCCCGCAACAAGAAATCCGGAGAGCTGGTTGCTGTGAAGTCTTCAACACTACCAGCTACCTGCG  
 GCCCGCGAGGTGCAGGTGAGGGAGTTTGGAGTCTGCGGAAGCTGAACCACCAGAACATCGTCAAGCTC  
 TTTGCGGTGGAGGAGACGGGCGAAGCCGGCAGAAAGTACTGGTATGGAGTACTGCTCCAGTGGGAGCC  
 TGCTGAGTGTGCTGGAGAGCCCTGAGAATGCCTTTGGGCTGCCTGAGGATGAGTTCCTGGTGGTGTGCG  
 CTGTGTGGTGGCCGGCATGAACCACCTGCGGGAGAACGGCATTGTGCATCGCGACATCAAGCCGGGAAC  
 ATCATGCGCCTCGTAGGGGAGGAGGGGCAGAGCATCTACAAGCTGACAGACTTCGGCGCTGCCCGGAGC  
 TGGATGATGATGAGAAGTTCGTCTCGTCTATGGGACTGAGGAGTACCTGCATCCCGACATGTATGAGCG  
 GCGGTGCTTCGAAAGCCCCAGCAAAAAGCGTTCCGGGTGACTGTGGATCTCTGGAGCATTGGAGTGACC  
 TTGTACCATGCAGCCACTGGCAGCCTGCCTTTCATCCCTTTGGTGGGCCACGGCGGAACAGGAGATCA  
 TGTACCGGATCACCCAGGAGAAGCCGGCTGGGGCCATTGCAGGTGCCAGAGCGGGAGAACGGGCCCT  
 GGAGTGGAGCTACACCCTCCCCATCACCTGCCAGCTGTACTGGGGTGCAGAGCCAGCTGGTGGCCATC  
 CTGGCCAAACATCTGGAGGTGGAGCAGGCCAAGTGTGGGGCTTCGACCAGTTCTTTGCGGAGACCAGTG  
 ACATCTGCAGCGAGTTGTCTGTCCATGTCTTCCCTGTCCCAGGCAGTCTGCACCACATCTATATCCA  
 TGCCCAACAACAGATAGCCATTTCCAGGAGCCGTGCACAAGCAGACCAGTGTGGCCCCCGACACCAG  
 GAGTACCTCTTTGAGGGTACCTCTGTCTCGAGCCAGCGTCTCAGCACAGCACATCGCCACACGA  
 CGGCAAGCAGCCCCCTGACCCTTTCAGCACGCCATCCCTAAGGGGCTGGCCTTCAGGGACCCTGCTCT  
 GGACGTCCCCAAGTTCGTCCCCAAAGTGGACCTGCAGGCGGATTACAACACTGCCAAGGGCGTGTGGGC  
 GCCGGCTACCAGGCCCTGCGGCTGGCACGGGCCCTGCTGGATGGGCAGGAGCTAATGTTTCGGGGCTGC  
 ACTGGGTGATGGAGGTGCTCCAGGCCACATGCAGACGGACTCTGGAAGTGGCAAGGACATCCCTCTCTA  
 CCTCAGCAGCAGCCTGGGAACTGAGAGGTTGAGCAGCGTGGTGGAAAGCCTGAGATCCAGGAACTGAAG  
 GCGGCTGCAGAACTGAGGTCCAGGCTGCGGACTCTAGCGGAGGTCTCTCCAGATGCTCCCAAAATATCA  
 CGGAGACCCAGGAGCCTGAGCAGCCTGAACCGGAGCTGGTGAAGAGCCGGGATCAGGTACATGAGGA  
 CAGAAGCATCCAGCAGATTCAGTGTGTTGGACAAGATGAAGTTCATCTACAAACAGTTCAAGAAGTCT  
 AGGATGAGGCCAGGGCTTGCTACAACGAGGAGCAGATTCACAAGCTGGATAAGGTGAATTTCAATCATT  
 TAGACAAAAGACTCCTGCAGGTGTTCCAGGAGGAGTGCCTGCAGAAGTATCAAGCGTCTTAGTCACACA  
 CGGCAAGAGGATGAGGTGGTGCACGAGACCAGGAACCTGCGCCTGGTTGGCTGTTCTGTGGGTGCC  
 TGTAACACAGAAGCCAGGGGCTCCAGGAGAGTCTCAGCAAGCTCCTGGAAGAGCTATCTACCAGCTCC  
 TTCAGGACCGAGCAAGGGGGCTCAGGCCTCGCCGCTCCCATAGCTCCTTACCCAGCCCTACACGAAA  
 GGACCTGCTTCTCCACATGCAAGAGCTCTGCGAGGGGATGAAGCTGTGGCATCTGACCTCCTGGACAAC  
 AACCGCATCATCGAACGGCTAAATAGAGTCCCAGCACCTCCTGATGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC212481 representing NM\_014002  
Red=Cloning site Green=Tags(s)

MQSTANYLWHTDDLQGGATASVYKARNKKSSELVAVKVFNTTSYLRPREVQVREFEVLRLKLNHQNIIVKL  
 FAVEETGGSRQKVLVMEYCSSGSLLSVLESPENAFGLPEDEFLVLRVAVAGMNLHRENGIVHRDIKPGN  
 IMRLVGEEGQSIYKLTDFGAARELDDDEKFFSVYGTTEEYHPDMYERAVLRKPKQKAFGVTVDLWSIGVT  
 LYHAATGSLPFIPIFGPRRNKEIMYRITTEKPAGAIAGAQRRENGPLEWYTLPIITCQLSLGLQSLVPI  
 LANILEVEQAKCWGFDQFFAETSDILQRVVVHVFSLSQAVLHHIYIHAHNTIAIFQEAVHKQTSVAPRHQ  
 EYLFEHGLCVLEPSVSAQHIAHTTASSPLTLFSTAIPKGLAFRDPALDVPKFPKVDLQADYNTAKGVLG  
 AGYQALRLARALLDQELMFRGLHWMEVLQATCRRTLEVARTSLLYLSSSLGTERFSSVAGTPEIQELK  
 AAAELRSRLRTLAEVLSRCSQNI TETQESLSSLNREL VKSRDQVHEDRSIQIQCCLDKMMNF IYKQFKKS  
 RMRPGLGYNEEQIHKLDKVNFSHLDKRLLQVFQECCVQKYQASLVTHGKRMRVHVHETRNHLRLVGCSSVAA  
 CNTEAQGVQESLSKLEELSHQLLQDRAKGAQASPPPIAPYSPTRKDLLLHMQLCEGMKLLASDLLDN  
 NRIIERLNRVPAPPDV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6104\\_c05.zip](https://cdn.origene.com/chromatograms/mk6104_c05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

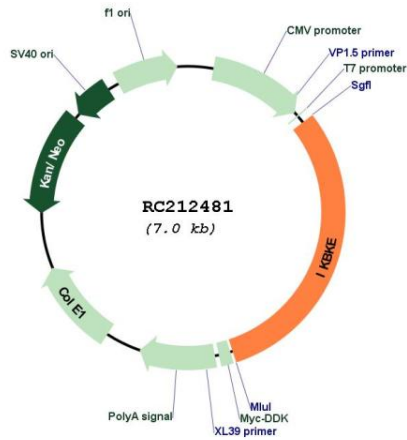
**ACCN:** NM\_014002

**ORF Size:** 2148 bp

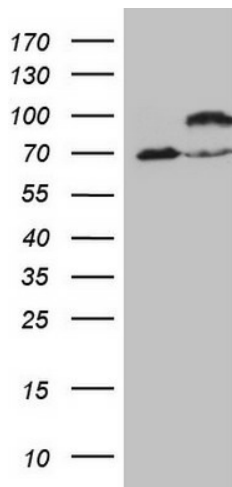
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

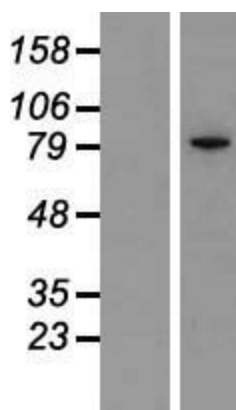
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_014002.4</a>
<b>RefSeq Size:</b>	3263 bp
<b>RefSeq ORF:</b>	2151 bp
<b>Locus ID:</b>	9641
<b>UniProt ID:</b>	<a href="#">Q14164</a>
<b>Cytogenetics:</b>	1q32.1
<b>Domains:</b>	pkinase
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway
<b>MW:</b>	80.3 kDa
<b>Gene Summary:</b>	IKBKE is a noncanonical I-kappa-B (see MIM 164008) kinase (IKK) that is essential for regulating antiviral signaling pathways. IKBKE has also been identified as a breast cancer (MIM 114480) oncogene and is amplified and overexpressed in over 30% of breast carcinomas and breast cancer cell lines (Hutti et al., 2009 [PubMed 19481526]).[supplied by OMIM, Oct 2009]

**Product images:**


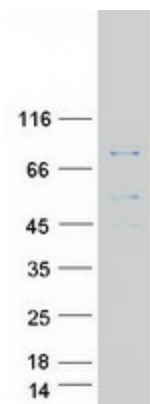
Circular map for RC212481



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IKBKE (Cat# RC212481, 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-*IKBKE* (Cat# [TA807632])(1:2000). Positive lysates [LY415533] (100ug) and [LC415533] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415533]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212481 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IKBKE protein (Cat# [TP312481]). The protein was produced from HEK293T cells transfected with IKBKE cDNA clone (Cat# RC212481) using MegaTran 2.0 (Cat# [TT210002]).