

## **Product datasheet for RC200711**

## IKB alpha (NFKBIA) (NM 020529) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: IKB alpha (NFKBIA) (NM\_020529) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: IKB alpha

Synonyms: EDAID2; IKBA; MAD-3; NFKBI

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC200711 representing NM\_020529

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC200711 representing NM\_020529

Red=Cloning site Green=Tags(s)

MFQAAERPQEWAMEGPRDGLKKERLLDDRHDSGLDSMKDEEYEQMVKELQEIRLEPQEVPRGSEPWKQQL TEDGDSFLHLAIIHEEKALTMEVIRQVKGDLAFLNFQNNLQQTPLHLAVITNQPEIAEALLGAGCDPELR DFRGNTPLHLACEQGCLASVGVLTQSCTTPHLHSILKATNYNGHTCLHLASIHGYLGIVELLVSLGADVN AQEPCNGRTALHLAVDLQNPDLVSLLLKCGADVNRVTYQGYSPYQLTWGRPSTRIQQQLGQLTLENLQML PESEDEESYDTESEFTEFTEDELPYDDCVFGGQRLTL

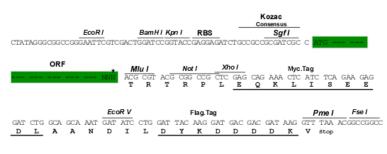
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg2881\_g01.zip">https://cdn.origene.com/chromatograms/mg2881\_g01.zip</a>

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM 020529

ORF Size: 951 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:** <u>NM 020529.3</u>

 RefSeq Size:
 1550 bp

 RefSeq ORF:
 954 bp

 Locus ID:
 4792

 UniProt ID:
 P25963

 Cytogenetics:
 14q13.2

 Domains:
 ANK

**Protein Families:** Druggable Genome

Protein Pathways: 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, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, 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

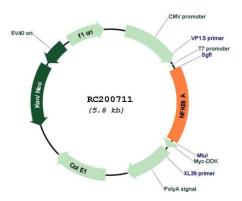
MW: 35.4 kDa

**Gene Summary:** This gene encodes a member of the NF-kappa-B inhibitor family, which contain multiple

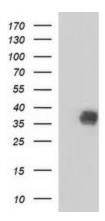
ankrin repeat domains. The encoded protein interacts with REL dimers to inhibit NF-kappa-B/REL complexes which are involved in inflammatory responses. The encoded protein moves between the cytoplasm and the nucleus via a nuclear localization signal and CRM1-mediated nuclear export. Mutations in this gene have been found in ectodermal dysplasia anhidrotic with T-cell immunodeficiency autosomal dominant disease. [provided by RefSeq, Aug 2011]



## **Product images:**

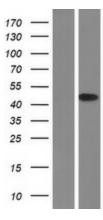


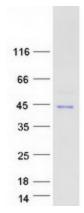
Circular map for RC200711



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NFKBIA (Cat# RC200711, 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-NFKBIA(Cat# [TA507178]). Positive lysates [LY412432] (100ug) and [LC412432] (20ug) can be purchased separately from OriGene.







Western blot validation of overexpression lysate (Cat# [LY412432]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200711 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified NFKBIA protein (Cat# [TP300711]). The protein was produced from HEK293T cells transfected with NFKBIA cDNA clone (Cat# RC200711) using MegaTran 2.0 (Cat# [TT210002]).