OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC323370

IKBKE (NM_014002) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IKBKE (NM_014002) Human Untagged Clone
Tag:	Tag Free
Symbol:	IKBKE
Synonyms:	IKK-E; IKK-i; IKKE; IKKI
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC323370 sequence for NM_014002 edited (data generated by NextGen Sequencing)

ATGCAGAGCACAGCCAATTACCTGTGGCACACAGATGACCTGCTGGGGCAGGGGGCCACT
GCCAGTGTGTACAAGGCCCGCAACAAGAAATCCGGAGAGCTGGTTGCTGTGATGGTCTTC
AACACTACCAGCTACCTGCGGCCCCGCGAGGTGCAGGTGAGGGAGTTTGAGGTCCTGCGG
AAGCTGAACCACCAGAACATCGTCAAGCTCTTTGCGGTGGAGGATACGGGCGGAAGCCGG
CAGAAGGTACTGGTGATGGAGTACTGCTCCAGTGGGAGCCTGCTGAGTGTGCTGGAGAGC
CCTGAGAATGCCTTTGGGCTGCCTGAGGATGAGTTCCTGGTGGTGCTGCGCTGTGTGGTG
GCCGGCATGAACCACCTGCGGGAGAACGGCATTGTGCATCGCGACATCAAGCCGGGGAAC
ATCATGCGCCTCGTAGGGGAGGAGGGGCAGAGCATCTACAAGCTGACAGACTTCGGCGCT
GCCCGGGAGCTGGATGATGATGAGAAGTTCGTCTCGGTCTATGGGACTGAGGAGTACCTG
CATCCCGACATGTATGAGCGGGCGGTGCTTCGAAAGCCCCAGCAAAAAGCGTTCGGGGTG
ACTGTGGATCTCTGGAGCATTGGAGTGACCTTGTACCATGCAGCCACTGGCAGCCTGCCC
TTCATCCCCTTTGGTGGGCCACGGCGGAACAAGGAGATCATGTACCGGATCACCACGGAG
AAGCCGGCTGGGGCCATTGCAGGTGCCCAGAGGCGGGAGAACGGGCCCCTGGAGTGGAGC
TACACCCTCCCCATCACCTGCCAGCTGTCACTGGGGCTGCAGAGCCAGCTGGTGCCCATC
CTGGCCAACATCCTGGAGGTGGAGCAGGCCAAGTGCTGGGGCTTCGACCAGTTCTTTGCG
GAGACCAGTGACATCCTGCAGCGAGTTGTCGTCCATGTCTTCTCCCTGTCCCAGGCAGTC
CTGCACCACATCTATATCCATGCCCACAACACGATAGCCATTTTCCAGGAGGCCGTGCAC
AAGCAGACCAGTGTGGCCCCCCGACACCAGGAGTACCTCTTTGAGGGTCACCTCTGTGTC
CTCGAGCCCAGCGTCTCAGCACAGCACATCGCCCACACGACGGCAAGCAGCCCCCTGACC
CTCTTCAGCACAGCCATCCCTAAGGGGCTGGCCTTCAGGGACCCTGCTCTGGACGTCCCC
AAGTTCGTCCCCAAAGTGGACCTGCAGGCGGATTACAACACTGCCAAGGGCGTGTTGGGC
GCCGGCTACCAGGCCCTGCGGCTGGCACGGGCCCTGCTGGATGGGCAGGAGCTAATGTTT
CGGGGGCTGCACTGGGTCATGGAGGTGCTCCAGGCCACATGCAGACGGACTCTGGAAGTG
GCAAGGACATCCCTCCTCTACCTCAGCAGCAGCCTGGGAACTGAGAGGTTCAGCAGCGTG
GCTGGAACGCCTGAGATCCAGGAACTGAAGGCGGCTGCAGAACTGAGGTCCAGGCTGCGG
ACTCTAGCGGAGGTCCTCTCCAGATGCTCCCAAAATATCACGGAGACCCAGGAGAGCCTG
AGCAGCCTGAACCGGGAGCTGGTGAAGAGCCGGGATCAGGTACATGAGGACAGAAGCATC
CAGCAGATTCAGTGCTGTTTGGACAAGATGAACTTCATCTACAAACAGTTCAAGAAGTCT
AGGATGAGGCCAGGGCTTGGCTACAACGAGGAGCAGATTCACAAGCTGGATAAGGTGAAT
TTCAGTCATTTAGCCAAAAGACTCCTGCAGGTGTTCCAGGAGGAGTGCGTGCAGAAGTAT
CAAGCGTCCTTAGTCACACACGGCAAGAGGATGAGGGTGGTGCACGAGACCAGGAACCAC
CTGCGCCTGGTTGGCTGTTCTGTGGCTGCCTGTAACACAGAAGCCCAGGGGGTCCAGGAG
AGTCTCAGCAAGCTCCTGGAAGAGCTATCTCACCAGCTCCTTCAGGACCGAGCAAAGGGG
GCTCAGGCCTCGCCGCCTCCCATAGCTCCTTACCCCAGCCCTACACGAAAGGACCTGCTT
CTCCACATGCAAGAGCTCTGCGAGGGGATGAAGCTGCTGGCATCTGACCTCCTGGACAAC
AACCGCATCATCGAACGGCTAAATAGAGTCCCAGCACTTCCTGATGTCTGA

Clone variation with respect to NM_014002.3
113 a=>t;201 t=>c;225 g=>t;2138 c=>t

5' Read Nucleotide Sequence:

```
>OriGene 5' read for mutant NM_014002 unedited
CCCGCCCGTTCGAGCAACTGGGCGGTAGGCGCTGTACGGTCTGTGGAGGTCTATATAAGCAGAGCTCGTT
TAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACCAGAAGAAACC
CACTAGTCCCAGCTCCTGGGGTGGCACAGACATTGCAACTGGCCCTGCCTGTGGGTCCTAGGGGCCCTTG
GCTACCAGGAGGCTAAGAACACTGCTCATGAATGACAGTGAGCCCTGAAAGCTCTGGGGGTGTCACCCAG
TCCCACAAGCCTGCATCCCCTGCAGTGGAGATGGGCTCAGCTCCTGGACGTGCCACAGACAGAAAGCATA
ACATACAGTTCGCCAGGAGAGCCTTTGCCTGACTCAGGGCAGCTTAAAGTTGGGGGCAGAAGTGACAGCC
AGCTCAGGGCAGAAATGCAAAGCCAGCAATTACTGGTGGCAACGATAACTGGCGGGGCAGGGGCCCTGCA
TTGTGTAAAGGCCGCAAAGAAATCGAAAACTGTTTGCTGTATGGTTTAAAATACAGCTACTGGGCCCCGA
GGGTGAGTGAAGGATTTAAGGCCTGGGAACTAACCCCGAAACTCTCAGCTTTCGTGAGAGACCGGCGAAC
CGCAAAGCTGTGTGAGACTCTCCCTGGACCCTGAGTGTGTGAACCGGAAGCCTGGTCGCAGAGATACCTG
TGTCGCCTGTGGCGCGTACACTGGGAACGCTGCTCTGCTAACGGACATGCGTAGAGATGTACACTACAAA
AAATGCGCGAAGGCGGT
```

Kinase Domain Sequence:

```
>SC323370 kinase domain raw sequence. By performing BLASTX analysis with this sequence
against NCBI refernce protein database, you can confirm the presence of the kinase-
deficient mutation
CKACTGMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGT
CAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACCAGAAGAAACCCACTAGTCCCA
GCTCCTGGGGTGGCACAGACATTGCAACTGGCCCTGCCTGTGGGTCCTAGGGGCCCTTGGCTACCAGGAG
GCTAAGAACACTGCTCATGAATGACAGTGAGCCCTGAAAGCTCTG
```

Restriction Sites: Please inquire

ACCN: NM_014002

Insert Size: 4000 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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.

RefSeq: NM_014002.2, NP_054721.1

RefSeq Size: 3263 bp

RefSeq ORF: 2151 bp

Locus ID:	9641
UniProt ID:	Q14164
Cytogenetics:	1q32.1
Domains:	pkinase
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway, Toll-like receptor signaling pathway
Gene Summary:	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] Transcript Variant: This variant (1) is the longest transcript and it encodes the longest protein (isoform 1).