

IKKe recombinant protein

Recombinant IKKe protein

CATALOG #
AAA60143

HOST
Baculovirus

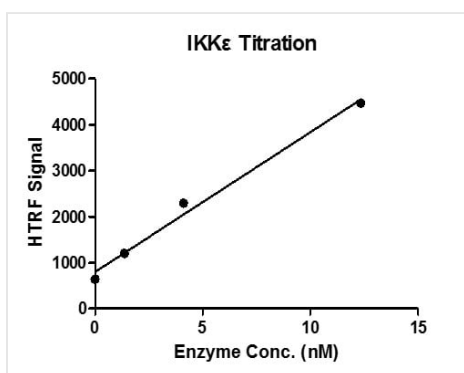
PRODUCT SYNONYMS

IKKe; Recombinant IKKe protein; IKBKE; Inhibitor Of Nuclear Factor Kappa B Kinase Subunit Epsilon; IKKe recombinant protein

PRODUCT SPECIFICATIONS

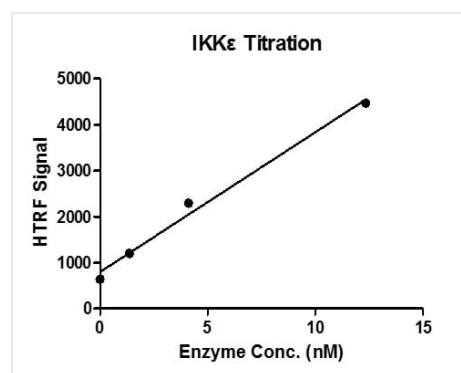
Host	Baculovirus
Form/Format	Recombinant IKKe protein is supplied at a concentration of 0.3ug/ul in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	This protein is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Kinase Activity Assay Conditions: 1uM STK S3 substrate was incubated with different concentrations of IKKe protein in 10ul reaction system containing 1xEnzymatic Buffer, 5mM MgCl2, 1mM DTT and 100uM ATP for 1 hour. The 10ul detection reagents containing STK antibody and SA-XL665, each of which was 1:100 diluted with 1x Detection Buffer, were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature, and HTRF KinASE STK assay was used to detect the enzymatic activity.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



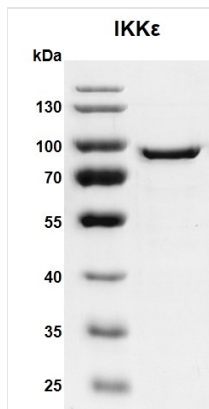
Application Data

HTRF assay for IKKe activity 1 uM STK S3 substrate was incubated with different concentrations of IKKe protein in reaction system for 1 hour. The detection reagents were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature, and HTRF KinASE TK assay was used to detect the enzymatic activity.



Application Data

HTRF assay for IKKe activity 1 uM STK S3 substrate was incubated with different concentrations of IKKe protein in reaction system for 1 hour. The detection reagents were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature, and HTRF KinASE TK assay was used to detect the enzymatic activity.



SDS-PAGE

Recombinant IKKe protein 10% SDS-PAGE Coomassie staining MW: 81.7 kDa Purity: >90%

ADDITIONAL INFORMATION

Related Product Information for IKKe recombinant protein

Short Description: Recombinant human IKKe protein was expressed in a baculovirus expression system as the full-length protein (accession number NP_054721.1) with an N-terminal DYKDDDDK tag. The molecular weight of the protein is 81.7 kDa. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Background: IKKe (Inhibitor Of Nuclear Factor Kappa B Kinase Subunit Epsilon, also known as IKBKE), is a noncanonical I-kappa-B kinase (IKK) that is essential for regulating antiviral signaling pathways. It's a serine/threonine kinase that plays an essential role in regulating inflammatory responses to viral infection, through the activation of the type I IFN, NF-kappa-B and STAT signaling. It also involves in TNFα and inflammatory cytokines, like Interleukin-1, signaling. Following activation of viral RNA sensors, such as RIG-I-like receptors, IKKe associates with DDX3X and phosphorylates interferon regulatory factors (IRFs), IRF3 and IRF7, as well as DDX3X. This activity allows subsequent homodimerization and nuclear translocation of the IRF3 leading to transcriptional activation of pro-inflammatory and antiviral genes including IFNβ. In order to establish such an antiviral state, IKKe forms several different complexes whose composition depends on the type of cell and cellular stimuli. Thus, several scaffolding molecules including IPS1/MAVS, TANK, AZI2/NAP1 or TBKBP1/SINTBAD can be recruited to the IKKe-containing-complexes. It can be activated by polyubiquitination in response to TNF&alpha and interleukin-1, regulate the NF-kappa-B signaling pathway through, at least, the phosphorylation of CYLD. It can phosphorylate inhibitors of NF-kappa-B thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor. In addition, IKKe is also required for the induction of a subset of ISGs which displays antiviral activity, may be through the phosphorylation of STAT1 at Ser-708. Phosphorylation of STAT1 at Ser- 708 seems also to promote the assembly and DNA binding of ISGF3 (STAT1:STAT2:IRF9) complexes compared to GAF (STAT1:STAT1) complexes, in this way regulating the balance between type I and type II IFN responses.

Product Categories/Family for IKKe recombinant protein

[Recombinant Proteins](#); [Kinase](#); [Transcription](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	7661946
NCBI GeneID	9641
NCBI Accession #	NP_054721.1
NCBI GenBank Nucleotide #	NM_014002.3
UniProt Accession #	Q14164; Q3KR43; Q5JTS6; D3DT78; Q3B754
Molecular Weight	80,462 Da
NCBI Official Full Name	inhibitor of nuclear factor kappa-B kinase subunit epsilon isoform 1
NCBI Official Synonym Full Names	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase epsilon
NCBI Official Symbol	IKBKE
NCBI Official Synonym Symbols	IKKE; IKKI; IKK-E; IKK-i; KIAA0151; MGC125294; MGC125295; MGC125297

NCBI Protein Information	inhibitor of nuclear factor kappa-B kinase subunit epsilon; IKK-epsilon; OTTHUMP00000034540; I-kappa-B kinase epsilon; inducible IkappaB kinase; IKK-related kinase epsilon; inducible I kappa-B kinase
UniProt Protein Name	Inhibitor of nuclear factor kappa-B kinase subunit epsilon
UniProt Gene Name	IKBKE
UniProt Synonym Gene Names	IKKE; IKKI; KIAA0151; I-kappa-B kinase epsilon; IKK-E; IKK-epsilon; IkbKE; IKK-i
UniProt Entry Name	IKKE_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/ikbke-recombinant-protein-baculovirus/60143>