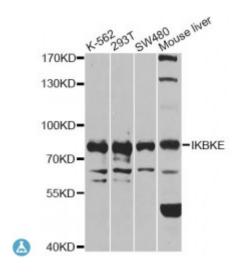


## **Anti-IKBKE Antibody**



Model STJ116028

**Host** Rabbit

Reactivity Human, Mouse

**Applications** WB

Immunogen Recombinant protein of human IKBKE

**Gene ID** 9641

Gene Symbol <u>IKBKE</u>

**Dilution range** WB 1:500 - 1:2000

**Tissue Specificity** Highly expressed in spleen followed by thymus, peripheral blood leukocytes,

pancreas, placenta, Weakly expressed in lung, kidney, prostate, ovary and

colon

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

Protein Name Inhibitor of nuclear factor kappa-B kinase subunit epsilon I-kappa-B kinase

epsilon IKK-E IKK-epsilon IkBKE

Molecular Weight 80.462 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage Instruction** Store at -20C. Avoid freeze / thaw cycles.

**Database Links** 

HGNC:14552OMIM:605048Reactome:R-HSA-9013973

**Alternative Names** 

Inhibitor of nuclear factor kappa-B kinase subunit epsilon I-kappa-B kinase epsilon IKK-E IKK-epsilon IkBKE

**Function** 

Serine/threonine kinase that plays an essential role in regulating inflammatory responses to viral infection, through the activation of the type I IFN, NFkappa-B and STAT signaling, Also involved in TNFA and inflammatory cytokines, like Interleukin-1, signaling, Following activation of viral RNA sensors, such as RIG-I-like receptors, 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 proinflammatory and antiviral genes including IFNB, In order to establish such an antiviral state, IKBKE 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 IKBKE-containing-complexes, Activated by polyubiquitination in response to TNFA and interleukin-1, regulates the NF-kappa-B signaling pathway through, at least, the phosphorylation of CYLD, Phosphorylates 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, 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, Protects cells against DNA damage-induced cell death, Also plays an important role in energy balance regulation by sustaining a state of chronic, low-grade inflammation in obesity, wich leads to a negative impact on insulin sensitivity, Phosphorylates AKT1,

Cellular Localization

Cytoplasm,

Post-translational Modifications

Autophosphorylated and phosphorylated by IKBKB/IKKB, Phosphorylation at Ser-172 is enhanced by the interaction with DDX3X, Phosphorylated at Thr-501 upon IFN activation,

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