

IKBKE Antibody

Rabbit mAb **Catalog # AP91906**

Specification

IKBKE Antibody - Product Information

WB, IHC, FC, ICC Application

Primary Accession 014164 Clonality **Monoclonal Other Names**

IKBKE; IKK-E; IKK-i; IKKE; IKKI; IKKi/IKKe;

Isotype Rabbit IgG Host **Rabbit** Calculated MW 80462 Da

IKBKE Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A

Purification **Affinity-chromatography**

A synthesized peptide derived from human **Immunogen**

IKKi/IKKe

Description 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. May play a special role in the immune response. Protects cells against DNA

damage-induced cell death.

Rabbit IgG in phosphate buffered saline, Storage Condition and Buffer

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

IKBKE Antibody - Protein Information

Name IKBKE

Synonyms IKKE, IKKI, KIAA0151

Function

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. 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 pro-inflammatory 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' also seems 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 Location

Cytoplasm. Nucleus. Nucleus, PML body. Note=Targeting to PML nuclear bodies upon DNA damage is TOPORS-dependent (PubMed:20188669) Located diffusely throughout the cytoplasm but locates to punctate cytoplasmic bodies when coexpressed with TRIM6 (PubMed:24882218)

Tissue Location

Highly expressed in spleen followed by thymus, peripheral blood leukocytes, pancreas, placenta. Weakly expressed in lung, kidney, prostate, ovary and colon

IKBKE Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IKBKE Antibody - Images



