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Mouse Ikbke Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14288c

Product Information

Application	WB, E
Primary Accession	Q9R0T8
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35075
Calculated MW	80953
Antigen Region	470-498

Additional Information

Gene ID	56489
Other Names	Inhibitor of nuclear factor kappa-B kinase subunit epsilon, I-kappa-B kinase epsilon, IKK-E, IKK-epsilon, IkBKE, Inducible I kappa-B kinase, IKK-i, Ikbke, Ikke, Ikki
Target/Specificity	This Mouse Ikbke antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 470-498 amino acids from the Central region of mouse Ikbke.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Ikbke Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Ikbke
Synonyms	Ikke, Ikki
Function	Serine/threonine kinase that plays an essential role in regulating

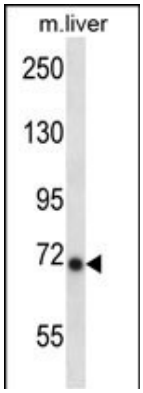
	inflammatory responses to viral infection, through the activation of the type I IFN, NF-kappa-B and STAT signaling (PubMed:15210742, PubMed:22171011). Also involved in TNFA and inflammatory cytokines, like Interleukin-1, signaling (By similarity). Following activation of viral RNA sensors, such as RIG-I-like receptors, associates with DDX3X and phosphorylates interferon regulatory factors (IRFs), IRF3 and IRF7, as well as DDX3X (By similarity). This activity allows subsequent homodimerization and nuclear translocation of the IRF3 leading to transcriptional activation of pro-inflammatory and antiviral genes including IFNB3 In order to establish such an antiviral state, IKBKE forms several different complexes whose composition depends on the type of cell and cellular stimuli (By similarity). Thus, several scaffolding molecules including IPS1/MAVS, TANK, AZI2/NAP1 or TBKBP1/SINTBAD can be recruited to the IKBKE-containing-complexes (By similarity). 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' (PubMed:17332413, PubMed:22065572). 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 (PubMed:17332413, PubMed:22065572). Activated by polyubiquitination in response to TNFA and interleukin-1, regulates the NF-kappa-B signaling pathway via the phosphorylation of CYLD, NFKBIA and p65/RELA (PubMed:10421793). Activates NF-kappa-B by mediating phosphorylation and inactivation of CYLD (By similarity). Phosphorylates inhibitors of NF-kappa-B, such as NFKBIA, thus leading to the dissociation of the inhibitor/NF-kappa-B complex and ultimately the degradation of the inhibitor (PubMed:10421793). Also activates NF- kappa-B signaling by mediating phosphorylation and activation of STING1 (PubMed:39262777). Protects cells against DNA damage-induced cell death (By similarity). 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 (PubMed:19737522, PubMed:23396211). Phosphorylates AKT1 (By similarity).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q14164}. Nucleus {ECO:0000250|UniProtKB:Q14164}. Nucleus, PML body {ECO:0000250|UniProtKB:Q14164}. Note=Targeting to PML nuclear bodies upon DNA damage is TOPORS-dependent. Located diffusely throughout the cytoplasm but locates to punctate cytoplasmic bodies when coexpressed with TRIM6. {ECO:0000250|UniProtKB:Q14164}
Tissue Location	Expressed in bone marrow-derived macrophages and at low levels in liver and white adipose tissue (at protein level) Detected in muscle and lung.

Background

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 (By similarity).

Images

Mouse Ikbke Antibody (Center) (Cat. #AP14288c) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the Ikbke antibody detected the Ikbke protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.