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# Mouse Ikbke Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14288c

## Product Information

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| **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

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| **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

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

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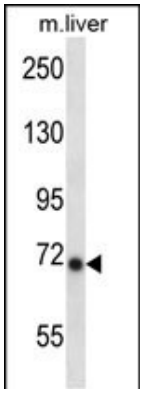
| | inflammatory responses to viral infection, through the activation of the type I IFN, NF-kappa-B and STAT signaling. Also involved in TNFA and inflammatory cytokines, like Interleukin-1, signaling. Following activation of viral RNA sensors, such as RIG-I- like receptors, associates with DDX3X and 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 {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'.