10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# phospho-IKB epsilon (Ser22) Rabbit pAb

Catalog # AP97062

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, IHC-F, IF |
| **Primary Accession** | O00221 |
| **Other Accession** | O00221 |
| **Reactivity** | Rat, Mouse |
| **Predicted** | Human, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 52864 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthesised phosphopeptide derived from human IKB epsilon around the phosphorylation site of Ser22 |
| **Epitope Specificity** | LR(p-S)LR |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the NF-kappa-B inhibitor family. Contains 6 ANK repeats. |
| **SUBUNIT** | Interacts with RELA, REL, NFKB1 nuclear factor NF-kappa-B p50 subunit and NFKB2 nuclear factor NF-kappa-B p52 subunit. |
| **Post-translational modifications** | Serine phosphorylated; followed by proteasome-dependent degradation. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | NFKB1 or NFKB2 is bound to REL, RELA, or RELB to form the NFKB complex. The NFKB complex is inhibited by I-kappa-B proteins (NFKBIA, or NFKBIB), which inactivate NF-kappa-B by trapping it in the cytoplasm. Phosphorylation of serine residues on the I-kappa-B proteins by kinases (IKBKA, or IKBKB) marks them for destruction via the ubiquitination pathway, thereby allowing activation of the NF-kappa-B complex. Activated NFKB complex translocates into the nucleus and binds DNA at kappa-B-binding motifs such as 5-prime GGGRNNYYCC 3-prime or 5-prime HGGARNYYCC 3-prime (where H is A, C, or T; R is an A or G purine; and Y is a C or T pyrimidine). For some genes, activation requires NFKB interaction with other transcription factors, such as STAT, AP1 (JUN), and NFAT. |

## Additional Information

| | |
|---|---|
| **Gene ID** | 4794 |
| **Other Names** | IKBE; IKBE_HUMAN; NFKBIE; NF-kappa-BIE; I-kappa-B-epsilon (IkB-E \| IkB-epsilon \| IkappaBepsilon); NFKB inhibitor epsilon; nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon; NF-kappa-B inhibitor epsilon; NFKBIE \| IKB epsilon (phospho-S22); p-IKB epsilon; phospho-IKB epsilon; p-IκBe; NFKBIE \| IKB epsilon (phospho-Ser22) |

| | |
|---|---|
| **Dilution** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

| | |
|---|---|
| **Name** | NFKBIE |
| **Synonyms** | IKBE |
| **Function** | Sequesters NF-kappa-B transcription factor complexes in the cytoplasm, thereby inhibiting their activity (PubMed:9315679). Sequestered complexes include NFKB1-RELA (p50-p65) and NFKB1-REL (p50- c-Rel) complexes (PubMed:9135156, PubMed:9315679). Limits B-cell activation in response to pathogens, and also plays an important role in B-cell development (By similarity). |
| **Cellular Location** | Cytoplasm. |
| **Tissue Location** | Highly expressed in spleen, testis and lung, followed by kidney, pancreas, heart, placenta and brain. Also expressed in granulocytes and macrophages |

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