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#### SM7045P

## OriGene EU

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# Monoclonal Antibody to IKKe/IKKi

Alternate names: IkappaK iota/epsilon

Catalog No.: SM7045P

Quantity: 0.1 mg

Concentration: 0.5 mg/ml

Host / Isotype: Mouse / IgG

Clone: 107A1458

Immunogen: This antibody was raised against a His-tagged full-length human IKKe protein.

Applications: Western blot analysis: 2 µg/ml. An 80 kDa band should be observed. This antibody will cross-react with mouse IKKe. Recommended Positive Control: Daudi, HeLa, or NIH 3T3. Other applications note tested. Optimal dilutions of this antibody are dependent on

conditions and should be determined by the user.

Other applications not tested. Optimal dilutions are dependent on conditions and should

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Specificity: NF-kB (nuclear factor kB) is sequestered in the cytoplasm by IkB family of inhibitory

proteins that mask the nuclear localization signal of NF-kB thereby preventing

translocation of NF-kB to the nucleus (1). External stimuli such as tumor necrosis factor or other cytokines results in phosphorylation and degradation of IkB releasing NF-kB dimers.

NF-kB dimer subsequently translocates to the nucleus and activates target genes. Synthesis of IkBa is autoregulated (2). IkB proteins are phosphorylated by IkB kinase complex consisting of at least three proteins, IKK1/a, IKK2/b, and IKK3/g (3-5). Recently, using a substractive hybridization technique, a novel kinase, IKKi/IKKe has been isolated (6). LPS increases IKKi mRNA level in mouse macrophage cell lines. This protein has significant sequence homology with kinase domains of IKK1/a and IKK-2/b. Overexpression of wild type IKK-i in cells phosphorylates Ser32 and Ser36 of IkBa. Reacts with human and

mouse.

Store undiluted at 4°C, stable for 6 months. Do not freeze. Shelf life: one year from

despatch.

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3. Didonato, J.A., Hayakawa, M., Rothwarf, D.M., Zandi, E., and Karin, M. Nature 388: 548-

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