

# Anti-IKKa (C3)

**CATALOG No.:** PX133A SIZE: 100 μg

PX133B SIZE: 0.5 mg

#### **BACKGROUND:**

Nuclear factor kappa B (NF- $\kappa$ B) is a ubiquitous transcription factor and an essential mediator of gene expression during activation of immune and inflammatory responses. NF- $\kappa$ B mediates the expression of a great variety of genes in response to extracellular stimuli including IL-1, TNF $\alpha$ , and bacteria product LPS. NF- $\kappa$ B is associated with I $\kappa$ B proteins in the cell cytoplasm, which inhibit NF- $\kappa$ B activity. The long-sought I $\kappa$ B kinase (IKK), which phosphorylates I $\kappa$ B, and mediates I $\kappa$ B degradation and NF- $\kappa$ B activation, was recently identified by several laboratories (1-5). IKK is a serine protein kinase, and the IKK complex contains alpha and beta subunits (IKK $\alpha$  and IKK $\beta$ ). IKK $\alpha$  and IKK $\beta$  interact with each other and both are essential for the NF- $\kappa$ B activation. IKK $\alpha$  specifically phosphorylates I $\kappa$ B- $\alpha$ . IKK $\alpha$  is expressed in a variety of human tissues.

### SOURCE:

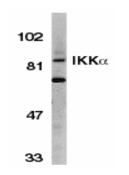
Rabbit anti-IKK $\alpha$  (C3) polyclonal antibody was raised against a peptide corresponding to amino acids 658 to 674 of human IKK $\alpha$  (1,2), which differs from corresponding murine sequence by one amino acid.

## APPLICATION:

This polyclonal antibody can be used for detection of IKK $\alpha$  by Western blot at 1:500 to 1:1000 dilution. Whole cell lysate from Jurkat cells can be used as positive control and an 85 kDa band should be detected. It has no cross response to IKK $\beta$  or IKK $\gamma$ . For research use only.

#### STORAGE:

It is supplied as immunoaffinity chromatography purified IgG, 100  $\mu$ g in 200  $\mu$ l of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of IKK $\alpha$  in Jurkat whole cell lysate with anti-IKK $\alpha$  (C3) at 1:500 dilution.

#### **REFERENCES:**

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- 2. Regnier CH, Song HY, Gao X, Goeddel DV, Cao Z, Rothe M. Identification and characterization of an IkappaB kinase. *Cell* 1997;90:373-83
- 3. Zandi E, Rothwarf DM, Delhase M, Hayakawa M, Karin M. The IkappaB kinase complex (IKK) contains two kinase subunits, IKKalpha and IKKbeta, necessary for IkappaB phosphorylation and NF-kappaB activation. *Cell* 1997;91:243-52
- 4. Woronicz JD, Gao X, Cao Z, Rothe M, Goeddel DY. IkappaB kinasebeta: NF-kappaB activation and complex formation with IkappaB kinasealpha and NIK. *Science* 1997;278:866-9
- 5. Mercurio F, Zhu H, Murray BW, Shevchenko A, Bennett BL, Li J, Young DB, Barbosa M, Mann M, Manning A, Rao A. IKK-1 and IKK-2: cytokine-activated IkappaB kinases essential for NF-kappaB activation. *Science* 1997;278:860-6

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**CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.** 

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