**BACKGROUND**

The transcription factor NFκB is retained in the cytoplasm in an inactive form by the inhibitory protein IκB. Activation of NFκB requires that IκB be phosphorylated on specific serine residues, which results in targeted degradation of IκB. IκB kinase (IKK), previously designated CHUK, interacts with IκB-α and specifically phosphorylates IκB-α on Ser 32 and 36, the sites that trigger its degradation. IKK-α appears to be critical for NFκB activation in response to proinflammatory cytokines. Phosphorylation of IκB by IKK-α is stimulated by the NFκB inducing kinase (NIK), which itself is a central regulator for NFκB activation in response to TNF and IL-1. The functional IKK complex contains three subunits, IKK-α, IKK-β and IKK-γ (also designated NEMO), and each appear to make essential contributions to IκB phosphorylation.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CHUK (human) mapping to 10q24.31, IKKB (human) mapping to 8q11.21; Chuk (mouse) mapping to 19 C3, Ikbkb (mouse) mapping to 8 A2.

**SOURCE**

p-IKKα/β (Ser 180/Ser 181)-R is an affinity purified rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 180/Ser 181 phosphorylated IKKα/β of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23470 P (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

p-IKKα/β (Ser 180/Ser 181)-R is recommended for detection of Ser 180 phosphorylated IKKα and Ser 181 phosphorylated IKKβ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:300-1:3000). p-IKKα/β (Ser 180/Ser 181)-R is also recommended for detection of correspondingly phosphorylated IKKα and IKKβ in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of p-IKKα: 85 kDa.

Molecular Weight of p-IKKβ: 87 kDa.

Positive Controls: HeLa + TNFα cell lysate: sc-2228.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.