**IKKα (B-8): sc-7606**

**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 α (IKKα), previously designated CHUK, interacts with IκB-α and specifically phosphorylates IκB-α on Ser 32 and 36, the sites that trigger its degradation. IKKα appears to be critical for NFκB activation in response to proinflammatory cytokines. Phosphorylation of IκB by IKKα 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, IKKα, IKKβ and IKKγ (also designated NEMO), and each appear to make essential contributions to IκB phosphorylation.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CHUK (human) mapping to 10q24.31.

**SOURCE**

IKKα (B-8) is a mouse monoclonal antibody raised against amino acids 1-745 representing full length IKKα of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for ChIP application, sc-7606 X, 200 µg/ml.

IKKα (B-8) is available conjugated to agarose (sc-7606 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7606 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7606 PE), fluorescein (sc-7606 FITC), Alexa Fluor® 488 (sc-7606 AF488), Alexa Fluor® 546 (sc-7606 AF546), Alexa Fluor® 594 (sc-7606 AF594) or Alexa Fluor® 647 (sc-7606 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7606 AF680) or Alexa Fluor® 790 (sc-7606 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM. In addition, IKKα (B-8) is available conjugated to either TRITC (sc-7606 TRITC, 200 µg/ml) or Alexa Fluor® 405 (sc-7606 AF405, 200 µg/ml), for IF, IHC(P) and FCM.

**STORAGE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

**APPLICATIONS**

IKKα (B-8) is recommended for detection of IKKα of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IKKα siRNA (h): sc-29365, IKKα shRNA Plasmid (h): sc-29365-SH and IKKα shRNA (h) Lentiviral Particles: sc-29365-V.

IKKα (B-8) X TransCruz antibody is recommended for ChIP assays.

**Molecular Weight of IKKα:** 85 kDa.

**DATA**

IKKα (B-8): sc-7606. Western blot analysis of IKKα expression in Jurkat (A), Ramos (B), A-673 (C), BJAB (D), HL-60 (E) and MDA-MB-435S (F) whole cell lysates.

IKKα (B-8): sc-7606. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). IKKα (B-8) HRP: sc-7606 HRP. Direct immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-510214 (B).

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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