

IKK α (M-280): sc-7182

BACKGROUND

The transcription factor NF κ B is retained in the cytoplasm in an inactive form by the inhibitory protein I κ B. Activation of NF κ B requires that I κ B be phosphorylated on specific serine residues, which results in targeted degradation of I κ B. I κ B kinase α (IKK α), previously designated CHUK, interacts with I κ B- α and specifically phosphorylates I κ B- α on the sites that trigger its degradation, serines 32 and 36. IKK α appears to be critical for NF κ B activation in response to proinflammatory cytokines. Phosphorylation of I κ B by IKK α is stimulated by the NF κ B inducing kinase (NIK), which itself is a central regulator for NF κ B 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 I κ B phosphorylation.

CHROMOSOMAL LOCATION

Genetic locus: CHUK (human) mapping to 10q24.31; Chuk (mouse) mapping to 19 C3.

SOURCE

IKK α (M-280) is a rabbit polyclonal antibody raised against amino acids 465-745 mapping at the C-terminus of IKK α of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose (sc-7182 AC) conjugate for immunoprecipitation, 500 μ g/0.25 ml agarose in 1 ml.

APPLICATIONS

IKK α (M-280) is recommended for detection of IKK α of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IKK α (M-280) is also recommended for detection of IKK α in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for IKK α siRNA (h): sc-29365, IKK α siRNA (m): sc-29366, IKK α shRNA Plasmid (h): sc-29365-SH, IKK α shRNA Plasmid (m): sc-29366-SH, IKK α shRNA (h) Lentiviral Particles: sc-29365-V and IKK α shRNA (m) Lentiviral Particles: sc-29366-V.

Molecular Weight of IKK α : 85 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, WEHI-231 whole cell lysate: sc-2213 or Jurkat whole cell lysate: sc-2204.

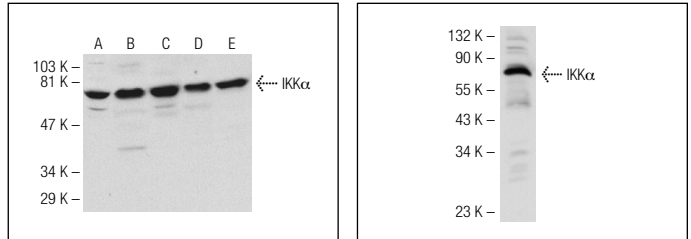
STORAGE

Store at 4 $^{\circ}$ C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

DATA



IKK α (M-280): sc-7182. Western blot analysis of IKK α expression in A-673 (A), BJAB (B), Jurkat (C), WEHI-231 (D) and PC-12 (E) whole cell lysates. IKK α (M-280): sc-7182. Western blot analysis of IKK α expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

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- Ramakrishnan, P., et al. 2011. Sam68 is required for both NF κ B activation and apoptosis signaling by the TNF receptor. *Mol. Cell* 43: 167-179.
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