

IKAP (V-15): sc-5407

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 the 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 the 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 appears to make essential contributions to I κ B phosphorylation. IKAP (IKK-complex-associated protein) is a protein that acts as a scaffold, interacting with NIK, IKK α and IKK β and assembling them into an active kinase complex.

REFERENCES

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- Cohen, L., Henzel, W.J. and Baeuerle, P.A. 1998. IKAP is a scaffold protein of the I κ B kinase complex. *Nature* 395: 292-296.

CHROMOSOMAL LOCATION

Genetic locus: IKBKAP (human) mapping to 9q31.

SOURCE

IKAP (V-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IKAP of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-5407 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IKAP (V-15) is recommended for detection of IKAP of 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 1:30-1:3000).

IKAP (V-15) is also recommended for detection of IKAP in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for IKAP siRNA (h): sc-40692, IKAP shRNA Plasmid (h): sc-40692-SH and IKAP shRNA (h) Lentiviral Particles: sc-40692-V.

Molecular Weight of IKAP: 150 kDa.

Positive Controls: PCEP-4 whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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



Try **IKAP (33): sc-136412** or **IKAP (H-11): sc-376509**, our highly recommended monoclonal alternatives to IKAP (V-15).