

I κ B α (C-terminus)

Cat. # IP1861

Host Rabbit Polyclonal

Size 100 μ l

Background:

The NF- κ B/Rel transcription factors are present in the cytosol in an inactive state complexed with the inhibitory I κ B proteins. Activation of I κ B α occurs through both serine and tyrosine phosphorylation events. Activation through phosphorylation at Ser-32 and Ser-36 is followed by proteasome-mediated degradation, resulting in the release and nuclear translocation of active NF- κ B. This pathway of I κ B α regulation occurs in response to various NF- κ B-activating agents, such as TNF α , interleukins, LPS, and irradiation. An alternative pathway for I κ B α regulation occurs through tyrosine phosphorylation of Tyr-42 and Tyr-305. Tyr-42 is phosphorylated in response to oxidative stress and growth factors. This phosphorylation can lead to degradation of I κ B α and NF- κ B-activation. In contrast, Tyr-305 phosphorylation by c-Abl has been implicated in I κ B α nuclear translocation and inhibition of NF- κ B-activation. Thus, tyrosine phosphorylation of I κ B α may be an important regulatory mechanism in NF- κ B signaling.

References

- Bui, N.T. et al. (2001) J Cell Biol 152(4):753.
Finco, T.S. et al. (1994) Proc. Natl. Acad. Sci. USA 91:11884.
Waris et al. (2003) J Biol Chem 278(42):40778.

Immunogen:

I κ B α (C-terminus) synthetic peptide (coupled to KLH) corresponding to amino acid residues at the C-terminus of human I κ B α . This peptide sequence has high homology to rat and mouse I κ B α , and low homology to other I κ B proteins.

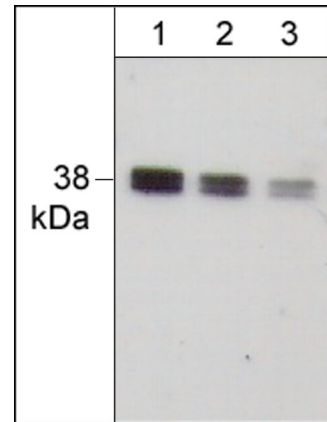
Applications:

WB 1:1,000
ELISA 1:2,000

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Related Products:

- IP1031 I κ B α (Tyr-42), phospho-specific Rabbit Polyclonal
IP1041 I κ B α (Tyr-305), phospho-specific Rabbit Polyclonal
IX1035 phospho-I κ B α (Tyr-42) Peptide
IX1045 phospho-I κ B α (Tyr-305) Peptide



Western blot image of human A431. The Blots were probed with anti-I κ B α (C-term.) polyclonal antibody at a dilution of 1:500 (lane 1), 1:1000 (lane 2), and 1:2000 (lane 3).

Buffer and Storage:

Rabbit polyclonal, affinity-purified antibody is supplied in 100 μ l phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20 $^{\circ}$ C. Do not aliquot. Stable for 1 year.

Specificity:

This antibody detects a 38 kDa* protein on SDS-PAGE immunoblots of human A431 and Jurkat cells, as well as mouse C2C12 cells.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

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