

I κ B- α (C-21): sc-371

BACKGROUND

On the basis of both functional and structural considerations, members of the I κ B family of proteins can be divided into four groups. The first of these groups, I κ B- α , includes the avian protein pp40 and the mammalian MAD-3, both of which inhibit binding of p50-p65 NF κ B complex or Rel protein to their cognate binding sites but do not inhibit the binding of p50 homodimer to κ B sites, suggesting that the I κ B- α family binds to the p65 subunit of p50-p65 heterocomplex through Ankyrin repeats. The second member of the I κ B family is represented by a protein designated I κ B- β . The third group of I κ B proteins is represented by I κ B- γ , which is identical in sequence with the C-terminal domain of the p110 precursor of NF κ B p50 and is expressed predominantly in lymphoid cells. An additional I κ B family member, I κ B- ϵ , has several phosphorylated forms and is primarily found complexed with Rel A and/or c-Rel.

CHROMOSOMAL LOCATION

Genetic locus: NFKBIA (human) mapping to 14q13.2; Nfkbia (mouse) mapping to 12 C1.

SOURCE

I κ B- α (C-21) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of I κ B- α of human origin.

PRODUCT

Each vial contains 100 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-371 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-371 AC, 500 μ g/0.25 ml agarose in 1 ml; as fluorescein conjugate for immunofluorescence, sc-371 FITC, 200 μ g/1 ml; as rhodamine conjugate for immunofluorescence, sc-371 TRITC, 200 μ g/1 ml; and as Alexa Fluor[®] 405 (sc-371 AF405), Alexa Fluor[®] 488 (sc-371 AF488) or Alexa Fluor[®] 647 (sc-371 AF647) conjugates for flow cytometry or immunofluorescence; 100 μ g/2 ml.

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APPLICATIONS

I κ B- α (C-21) is recommended for detection of I κ B- 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

I κ B- α (C-21) is also recommended for detection of I κ B- α in additional species, including equine, canine, bovine and porcine.

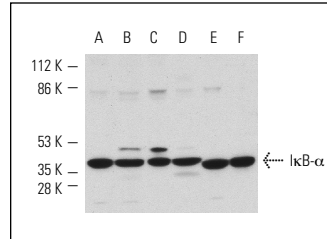
Suitable for use as control antibody for I κ B- α siRNA (h): sc-29360, I κ B- α siRNA (m): sc-29361, I κ B- α shRNA Plasmid (h): sc-29360-SH, I κ B- α shRNA Plasmid (m): sc-29361-SH, I κ B- α shRNA (h) Lentiviral Particles: sc-29360-V and I κ B- α shRNA (m) Lentiviral Particles: sc-29361-V.

Molecular Weight of I κ B- α : 35-41 kDa.

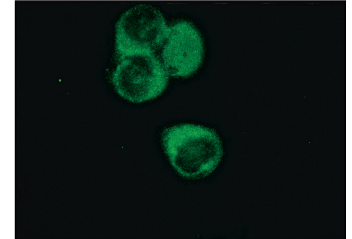
STORAGE

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

DATA



I κ B- α (C-21): sc-371. Western blot analysis of I κ B- α expression in HeLa (A), Jurkat (B), A-431 (C), HL-60 (D), NIH/3T3 (E) and KNRK (F) whole cell lysates.



I κ B- α (C-21): sc-371. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Kopp, E., et al. 1999. ECSIT is an evolutionarily conserved intermediate in the Toll/IL-1 signal transduction pathway. *Genes Dev.* 13: 2059-2071.
- Selimovic, D., et al. 2013. Vinblastine-induced apoptosis of melanoma cells is mediated by Ras homologous A protein (Rho A) via mitochondrial and non-mitochondrial-dependent mechanisms. *Apoptosis* 18: 980-997.
- Zhang, J.L., et al. 2013. Propofol inhibits hypoxia/reoxygenation-induced human gastric epithelial cell injury by suppressing the Toll-like receptor 4 pathway. *Kaohsiung J. Med. Sci.* 29: 289-298.
- Vasiljevic, A., et al. 2013. Enhanced pre-receptor glucocorticoid metabolism and lipogenesis impair Insulin signaling in the liver of fructose-fed rats. *J. Nutr. Biochem.* 24: 1790-1797.
- Chhunchha, B., et al. 2013. Curcumin abates hypoxia-induced oxidative stress based-ER stress-mediated cell death in mouse hippocampal cells (HT22) by controlling Prdx6 and NF κ B regulation. *Am. J. Physiol., Cell Physiol.* 304: C636-C655.
- Yang, C.S., et al. 2013. Small heterodimer partner-targeting therapy inhibits systemic inflammatory responses through mitochondrial uncoupling protein 2. *PLoS ONE* 8: e63435.
- da Silva, S.V., et al. 2013. Increased leptin response and inhibition of apoptosis in thymocytes of young rats offspring from protein deprived dams during lactation. *PLoS ONE* 8: e64220.

RESEARCH USE

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


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Try **I κ B- α (H-4): sc-1643** or **I κ B- α (B-3): sc-373893**, our highly recommended monoclonal alternatives to I κ B- α (C-21). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **I κ B- α (H-4): sc-1643**.