

I κ B- α (B-3): sc-373893

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 , a protein identical in sequence with the C-terminal domain of the p110 precursor of NF κ B p50 and expressed predominantly in lymphoid cells. An additional I κ B family member has been identified as I κ B- ϵ , a protein which 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.

SOURCE

I κ B- α (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-27 within the N-terminus of I κ B- α of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-373893 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

I κ B- α (B-3) is recommended for detection of I κ B- α of human origin by Western Blotting (starting dilution 1:100, 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).

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

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

Positive Controls: U-2 OS cell lysate: sc-2295, Jurkat whole cell lysate: sc-2204 or HL-60 whole cell lysate: sc-2209.

RESEARCH USE

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

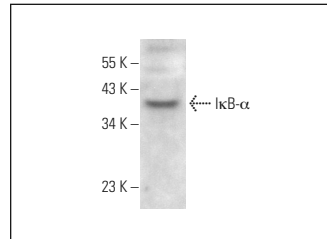
PROTOCOLS

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

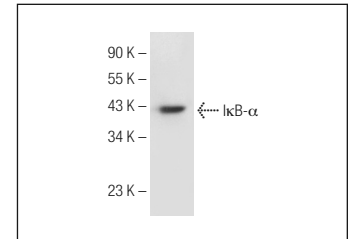
STORAGE

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 (B-3): sc-373893. Western blot analysis of I κ B- α expression in U-2 OS whole cell lysate.



I κ B- α (B-3): sc-373893. Western blot analysis of I κ B- α expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

- Planavila, A., et al. 2005. Peroxisome proliferator-activated receptor β / δ activation inhibits hypertrophy in neonatal rat cardiomyocytes. *Cardiovasc. Res.* 65: 832-841.
- Bao, M.H., et al. 2014. Protective effects of let-7a and let-7b on oxidized low-density lipoprotein induced endothelial cell injuries. *PLoS ONE* 9: e106540.
- Zhang, D., et al. 2015. Pinocembrin inhibits matrix metalloproteinase expression in chondrocytes. *IUBMB Life* 67: 36-41.
- Chan, L.P., et al. 2017. IL-8 promotes inflammatory mediators and stimulates activation of p38 MAPK/ERK-NF κ B pathway and reduction of JNK in HNSCC. *Oncotarget* 8: 56375-56388.
- Guo, X., et al. 2018. Shikimic acid prevents cartilage matrix destruction in human chondrocytes. *Int. Immunopharmacol.* 63: 155-160.
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- Pablos, A., et al. 2020. Protective effects of foam rolling against inflammation and notexin induced muscle damage in rats. *Int. J. Med. Sci.* 17: 71-81.
- Wang, X., et al. 2020. MicroRNA-16 inhibits endometrial stromal cell migration and invasion through suppression of the inhibitor of nuclear factor- κ B kinase subunit β /nuclear factor- κ B pathway. *Int. J. Mol. Med.* 46: 740-750.



See **I κ B- α (H-4): sc-1643** for I κ B- α antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.