**BACKGROUND**

On the basis of both functional and structural considerations, members of the \( \kappa B \) family of proteins can be divided into four groups. The first of these groups, \( \kappa B-\alpha \), includes the avian protein pp40 and the mammalian MAD-3, both of which inhibit binding of p50-p65 NF\( \kappa \)B complex or Rel protein to their cognate binding sites but do not inhibit the binding of p50 homodimer to \( \kappa B \) sites, suggesting that the \( \kappa B-\alpha \) family binds to the p65 subunit of p50-p65 heterocomplex through Ankyrin repeats. The second member of the \( \kappa B \) family is represented by a protein designated \( \kappa B-\beta \). The third group of \( \kappa B \) proteins is represented by \( \kappa B-\gamma \), which is identical in sequence with the C-terminal domain of the p110 precursor of NF\( \kappa \)B p50 and is expressed predominantly in lymphoid cells. An additional \( \kappa B \) family member, \( \kappa B-\epsilon \), 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**

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

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-371 A P, (100 µg 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 µg/0.25 ml agarose in 1 ml; as fluorescein conjugate for immunofluorescence, sc-371 FITC, 200 µg/1 ml; as rhodamine conjugate for immunofluorescence, sc-371 TRITC, 200 µg/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 µg/2 ml. Alexa Fluor®® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

\( \kappa B-\alpha \) (C-21) is recommended for detection of \( \kappa B-\alpha \) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

\( \kappa B-\alpha \) (C-21) is also recommended for detection of \( \kappa B-\alpha \) in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for \( \kappa B-\alpha \) siRNA (h): sc-29360, \( \kappa B-\alpha \) siRNA (m): sc-29381, \( \kappa B-\alpha \) shRNA Plasmid (h): sc-29360-SH, \( \kappa B-\alpha \) shRNA Plasmid (m): sc-29361-SH, \( \kappa B-\alpha \) shRNA (h) Lentiviral Particles: sc-29360-V and \( \kappa B-\alpha \) shRNA (m) Lentiviral Particles: sc-29361-V.

Molecular Weight of \( \kappa B-\alpha \): 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**

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

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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