

I κ B- ϵ (E-9): sc-374188

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.

REFERENCES

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- Haskill, S., et al. 1991. Characterization of an immediate-early gene induced in adherent monocytes that encodes I κ B-like activity. *Cell* 65: 1281-1289.
- Inoue, J., et al. 1992. I κ B- γ , a 70 kd protein identical to the C-terminal half of p110 NF κ B; a new member of the I κ B family. *Cell* 68: 1109-1120.
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- Whiteside, S.T., et al. 1997. I κ B- ϵ , a novel member of the I κ B family, controls RelA and cRel NF κ B activity. *EMBO J.* 16: 1413-1426.
- Simeonidis, S., et al. 1997. Cloning and functional characterization of mouse I κ B- ϵ . *Proc. Natl. Acad. Sci. USA* 94: 14372-14377.
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CHROMOSOMAL LOCATION

Genetic locus: NFKBIE (human) mapping to 6p21.1; Nfkbie (mouse) mapping to 17 B3.

SOURCE

I κ B- ϵ (E-9) is a mouse monoclonal antibody raised against amino acids 1-365 of I κ B- ϵ of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

I κ B- ϵ (E-9) is recommended for detection of I κ B- ϵ of mouse, rat and 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- ϵ siRNA (h): sc-35642, I κ B- ϵ siRNA (m): sc-35643, I κ B- ϵ shRNA Plasmid (h): sc-35642-SH, I κ B- ϵ shRNA Plasmid (m): sc-35643-SH, I κ B- ϵ shRNA (h) Lentiviral Particles: sc-35642-V and I κ B- ϵ shRNA (m) Lentiviral Particles: sc-35643-V.

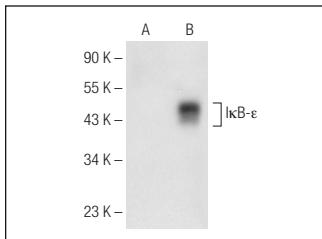
Molecular Weight of I κ B- ϵ : 51 kDa.

Positive Controls: I κ B- ϵ (m): 293T Lysate: sc-120929, THP-1 cell lysate: sc-2238 or WEHI-231 whole cell lysate: sc-2213.

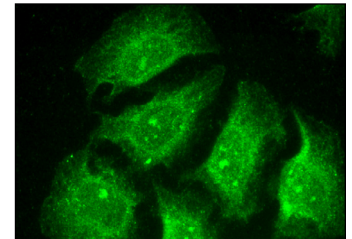
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



I κ B- ϵ (E-9): sc-374188. Western blot analysis of I κ B- ϵ expression in non-transfected: sc-117752 (A) and mouse I κ B- ϵ transfected: sc-120929 (B) 293T whole cell lysates.



I κ B- ϵ (E-9): sc-374188. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

STORAGE

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

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.