IκB-ε (M-364): sc-7155



The Power to Question

BACKGROUND

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

CHROMOSOMAL LOCATION

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

SOURCE

IκB- ϵ (M-364) is a rabbit polyclonal antibody raised against amino acids 1-365 of IκB- ϵ of mouse origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IκB- ϵ (M-364) is recommended for detection of IκB- ϵ 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).

Suitable for use as control antibody for $I\kappa B$ - ϵ siRNA (h): sc-35642, $I\kappa B$ - ϵ siRNA (m): sc-35643, $I\kappa B$ - ϵ shRNA Plasmid (h): sc-35642-SH, $I\kappa B$ - ϵ shRNA Plasmid (m): sc-35643-SH, $I\kappa B$ - ϵ shRNA (h) Lentiviral Particles: sc-35642-V and $I\kappa B$ - ϵ shRNA (m) Lentiviral Particles: sc-35643-V.

Molecular Weight of IκB-ε: 51 kDa.

Positive Controls: $I\kappa B$ - ϵ (m): 293T Lysate: sc-120929, THP-1 cell lysate: sc-2238 or WEHI-3 cell lysate: sc-3815.

STORAGE

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

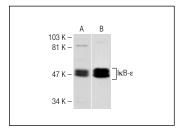
PROTOCOLS

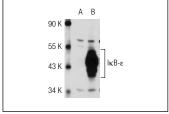
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

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

DATA





Western blot analysis of $I_KB-\epsilon$ expression in WEHI-231 whole cell lysates. Antibodies tested include $I_KB-\epsilon$ (M-364): sc-7155 (**A**) and $I_KB-\epsilon$ (M-121): sc-7156 (**B**).

 I_KB -ε (M-364): sc-7155. Western blot analysis of I_KB -ε expression in non-transfected 293T: sc-117752 (**A**) and mouse I_KB -ε transfected 293T: sc-120929 (**B**) whole call lysates

SELECT PRODUCT CITATIONS

- Guha, M., et al. 2000. Molecular mechanism of tumor necrosis factor gene expression in monocytic cells via hyperglycemia-induced oxidant stressdependent and independent pathways. J. Biol. Chem. 275: 17728-17739.
- Lopez-Rovirat, T., et al. 2000. Interaction and functional cooperation of NFκB with Smads. Transcriptional regulation of the Jun B promoter. J. Biol. Chem. 275: 28937-28946.
- Hernandez, M., et al. 2002. Secretory phospholipase A₂ elicits proinflammatory changes and upregulates the surface expression of FAS ligand in monocytic cells: potential relevance for atherogenesis. Circ. Res. 90: 38-45.
- Liu, J., et al. 2003. Distinct pathways for NFκB regulation are associated with aberrant macrophage IL-12 production in lupus- and diabetes-prone mouse strains. J. Immunol. 170: 4489-4496.
- 5. Lin, L. 2004. Modulation of Th1 activation and inflammation by the NF κ B repressor FOXJ1. Science 303: 1017-1020.
- Pallares, J., et al. 2004. Abnormalities in the NFκB family and related proteins in endometrial carcinoma. J. Pathol. 204: 569-577.
- Lin, L., et al. 2006. Coordination of NF_KB and NFAT antagonism by the forkhead transcription factor F0XD1. J. Immunol. 176: 4793-4803.
- 8. Shih, V.F., et al. 2012. Control of RelB during dendritic cell activation integrates canonical and noncanonical NF κ B pathways. Nat. Immunol. 13: 1162-1170.



Try $I\kappa B-\epsilon$ (G-4): sc-7275 or $I\kappa B-\epsilon$ (E-9): sc-374188, our highly recommended monoclonal alternatives to $I\kappa B-\epsilon$ (M-364).

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