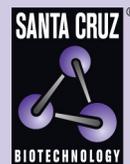


# $\kappa$ B-Ras1 (C-17): sc-10525



The Power to Question

## BACKGROUND

Small guanosine triphosphatases, typified by the mammalian Ras proteins, play major roles in the regulation of numerous cellular pathways.  $\kappa$ B-interacting Ras-like proteins,  $\kappa$ B-Ras1 and  $\kappa$ B-Ras2, belong to a subclass of evolutionarily conserved Ras-like proteins that differ from other Ras proteins in containing amino acids at positions 12 and 61 that are similar to those present in the oncogenic forms of Ras. These Ras-like proteins,  $\kappa$ B-Ras1 and  $\kappa$ B-Ras2, interact with the PEST domains of  $\kappa$ B $\alpha$  and  $\kappa$ B $\beta$  and decrease their rate of degradation.  $\kappa$ B-Ras2 shows 71% identity to  $\kappa$ B-Ras1. In cells,  $\kappa$ B-Ras proteins are associated only with NF $\kappa$ B: $\kappa$ B $\beta$  complexes and therefore may provide an explanation for the slower rate of degradation of  $\kappa$ B $\beta$  compared with  $\kappa$ B $\alpha$ .

## REFERENCES

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2. McCormick, F. 1994. Activators and effectors of Ras p21 proteins. *Curr. Opin. Genet. Dev.* 4: 71-76.
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5. Bos, J.L. 1998. The Ras gene family and human carcinogenesis. *Mutat. Res.* 195: 255-271.
6. Fenwick, C., Na, S.Y., Voll, R.E., Zhong, H., Im, S.Y., Lee, J.W. and Ghosh, S. 2000. A subclass of Ras proteins that regulate the degradation of  $\kappa$ B. *Science* 287: 869-873.

## CHROMOSOMAL LOCATION

Genetic locus: NKIRAS1 (human) mapping to 3p24.2; Nkiras1 (mouse) mapping to 14 A2.

## SOURCE

$\kappa$ B-Ras1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of  $\kappa$ B-Ras1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10525 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

$\kappa$ B-Ras1 (C-17) is recommended for detection of  $\kappa$ B-Ras1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

$\kappa$ B-Ras1 (C-17) is also recommended for detection of  $\kappa$ B-Ras1 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for  $\kappa$ B-Ras1 siRNA (h): sc-41796,  $\kappa$ B-Ras1 siRNA (m): sc-41797,  $\kappa$ B-Ras1 shRNA Plasmid (h): sc-41796-SH,  $\kappa$ B-Ras1 shRNA Plasmid (m): sc-41797-SH,  $\kappa$ B-Ras1 shRNA (h) Lentiviral Particles: sc-41796-V and  $\kappa$ B-Ras1 shRNA (m) Lentiviral Particles: sc-41797-V.

Molecular Weight of  $\kappa$ B-Ras1: 22 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, U-87 MG cell lysate: sc-2411 or rat brain extract: sc-2392.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.