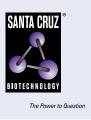
## SANTA CRUZ BIOTECHNOLOGY, INC.

# кB-Ras2 (F-12): sc-374311



### BACKGROUND

Small guanosine triphosphatases, typified by the mammalian Ras proteins, play major roles in the regulation of numerous cellular pathways. I $\kappa$ 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 I $\kappa$ B- $\alpha$  and I $\kappa$ 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-I $\kappa$ B- $\beta$  complexes and therefore may provide an explanation for the slower rate of degradation of I $\kappa$ B- $\alpha$ .

## **CHROMOSOMAL LOCATION**

Genetic locus: NKIRAS2 (human) mapping to 17q21.2; Nkiras2 (mouse) mapping to 11 D.

## SOURCE

 $\kappa$ B-Ras2 (F-12) is a mouse monoclonal antibody raised against amino acids 150-191 mapping at the C-terminus of  $\kappa$ B-Ras2 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG\_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

 $\kappa$ B-Ras2 (F-12) is available conjugated to agarose (sc-374311 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-374311 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374311 PE), fluorescein (sc-374311 FITC), Alexa Fluor<sup>®</sup> 488 (sc-374311 AF488), Alexa Fluor<sup>®</sup> 546 (sc-374311 AF546), Alexa Fluor<sup>®</sup> 594 (sc-374311 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-374311 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-374311 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-374311 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## **APPLICATIONS**

 $\kappa$ B-Ras2 (F-12) is recommended for detection of  $\kappa$ B-Ras2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

 $\kappa$ B-Ras2 (F-12) is also recommended for detection of  $\kappa$ B-Ras2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for  $\kappa$ B-Ras2 siRNA (h): sc-41798,  $\kappa$ B-Ras2 siRNA (m): sc-41799,  $\kappa$ B-Ras2 shRNA Plasmid (h): sc-41798-SH,  $\kappa$ B-Ras2 shRNA Plasmid (m): sc-41799-SH,  $\kappa$ B-Ras2 shRNA (h) Lentiviral Particles: sc-41798-V and  $\kappa$ B-Ras2 shRNA (m) Lentiviral Particles: sc-41799-V.

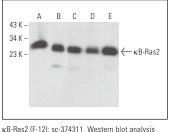
Molecular Weight of KB-Ras2: 22 kDa.

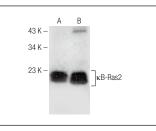
Positive Controls: HeLa whole cell lysate: sc-2200, C6 whole cell lysate: sc-364373 or RAW 264.7 whole cell lysate: sc-2211.

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG א BP-HRP: sc-516102 or m-IgG א 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 א BP-FITC: sc-516140 or m-IgG א 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





κB-Has2 (F-12): sc-3/4311. Western blot analysis of κB-Ras2 expression in HeLa (A), SK-N-SH (B), 3T3-L1 (C), C3H/10T1/2 (D) and C6 (E) whole cell lysates.  $\kappa$ B-Ras2 (F-12): sc-374311. Western blot analysis of  $\kappa$ B-Ras2 expression in HeLa (**A**) and RAW 264.7 (**B**) whole cell lysates.

## **SELECT PRODUCT CITATIONS**

- 1. Fan, S., et al. 2020. Dual NDP52 function in persistent CSFV infection. Front. Microbiol. 10: 2962.
- 2. Fan, S., et al. 2021. LDHB inhibition induces mitophagy and facilitates the progression of CSFV infection. Autophagy 17: 2305-2324.
- Li, W., et al. 2022. Interaction of SERINC5 and IFITM1/2/3 regulates the autophagy-apoptosis-immune network under CSFV infection. Virulence 13: 1720-1740.

#### **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.

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