

KappaB ras Antibody

Catalog # ASC10149

### Specification

# KappaB ras Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, E <u>O9NYS0</u> <u>AAF34998</u>, <u>7008402</u> Human, Mouse, Rat Rabbit Polyclonal IgG KappaB ras antibody can be used for detection of KappaB ras by Western blot at 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 1 μg/mL.

## KappaB ras Antibody - Additional Information

Gene ID

28512

Other Names KappaB ras Antibo

KappaB ras Antibody: KBRAS1, kappaB-Ras1, KBRAS1, NF-kappa-B inhibitor-interacting Ras-like protein 1, I-kappa-B-interacting Ras-like protein 1, Kappa B-Ras protein 1, NFKB inhibitor interacting Ras-like 1

Target/Specificity NKIRAS1;

#### **Reconstitution & Storage**

KappaB ras antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

KappaB ras Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## KappaB ras Antibody - Protein Information

Name NKIRAS1

Synonyms KBRAS1

#### Function

Atypical Ras-like protein that acts as a potent regulator of NF-kappa-B activity by preventing the degradation of NF-kappa-B inhibitor beta (NFKBIB) by most signals, explaining why NFKBIB is more resistant to degradation. May act by blocking phosphorylation of NFKBIB and mediating



cytoplasmic retention of p65/RELA NF-kappa-B subunit. It is unclear whether it acts as a GTPase. Both GTP- and GDP-bound forms block phosphorylation of NFKBIB.

Cellular Location Cytoplasm.

**Tissue Location** Widely expressed..

### KappaB ras Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### KappaB ras Antibody - Images



Western blot analysis of KappaB ras in RAW 264.7 cell lysate with KappaB ras antibody at 2  $\mu\text{g}/\text{mL}.$ 





Immunohistochemistry of KappaB ras in human lymph node tissue with KappaB ras antibody at 1  $\mu\text{g}/\text{mL}.$ 

# KappaB ras Antibody - Background

KappaB ras Antibody: KappaB ras-1 ( $\kappa$ B-ras-1) and kappaB-ras-2 are two small proteins that similar to Ras-like small GTPases that associate with I $\kappa$ B (I $\kappa$ B), an inhibitor of the transcription factor NF- $\kappa$ B. I $\kappa$ B exists in two homologous forms, I $\kappa$ B-alpha and I $\kappa$ B-beta, although I $\kappa$ B-beta contains a unique 47-amino acid region within its ankyrin domain. While inactive I $\kappa$ B-alpha-NF- $\kappa$ B complexes can shuttle in and out of the nucleus, I $\kappa$ B-beta-NF- $\kappa$ B complexes are retained exclusively in the cytoplasm. It is suggested that kappaB-ras proteins preferentially bind to the I $\kappa$ B-beta form through this unique insert within the ankyrin region, thus modulating the cellular location of I $\kappa$ B-beta and regulating the rate of degradation of I $\kappa$ B-beta. This antibody detects both kappaB-ras1 and kappaB-ras2.

### KappaB ras Antibody - References

Fenwick C, Na SY, Voll RE, et al. A subclass of Ras proteins that regulate the degradation of IkappaB. Science 2000; 287:869-73.

Chen Y, Wu J and Ghosh G. KappaB-Ras binds to the unique insert within the ankyrin repeat domain if IkappaBbeta and regulates cytoplasmic retention of IkappaBbeta x NF-kappaB complexes. J. Biol. Chem.2003; 278:23101-6.