

KappaB ras2 Antibody

Catalog # ASC10151

### Specification

# KappaB ras2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, E <u>O9NYR9</u> <u>NP\_060065</u>, <u>19072794</u> Human, Mouse, Rat Rabbit Polyclonal IgG KappaB ras2 antibody can be used for detection of KappaB ras1 by Western blot at 1 μg/mL.

# KappaB ras2 Antibody - Additional Information

Gene ID Other Names 28511

KappaB ras2 Antibody: KBRAS2, kappaB-Ras2, KBRAS2, NF-kappa-B inhibitor-interacting Ras-like protein 2, I-kappa-B-interacting Ras-like protein 2, Kappa B-Ras protein 2, NFKB inhibitor interacting Ras-like 2

Target/Specificity NKIRAS2;

#### **Reconstitution & Storage**

KappaB ras2 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 ras2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# KappaB ras2 Antibody - Protein Information

Name NKIRAS2

Synonyms KBRAS2

#### 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 nuclear localization 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 (By similarity).



Cellular Location Cytoplasm.

Tissue Location Widely expressed..

### KappaB ras2 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 ras2 Antibody - Images



Western blot analysis of KappaB ras2 in RAW264.7 cell lysate with KappaB ras2 antibody at 1  $\mu$ g/mL in the (A) absence and (B) presence of blocking peptide.

# KappaB ras2 Antibody - Background

KappaB ras2 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 is specific for kappaB-ras2 and has no cross-reactivity to kappaB-ras1.

### KappaB ras2 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.