

# KappaB ras1 Antibody

Catalog # ASC10150

## **Specification**

# **KappaB ras1 Antibody - Product Information**

Application WB, ICC Primary Accession Q9NYS0

Other Accession
Reactivity
Human, Mouse
Rost
Rabbit

Clonality Polyclonal Isotype IgG

Application Notes KappaB ras1 antibody can be used for

detection of KappaB ras1 by Western blot at 0.5 - 2 μg/mL. Antibody can also be used for immunocytochemistry starting at 1

μg/mL.

## KappaB ras1 Antibody - Additional Information

Gene ID 28512

**Other Names** 

KappaB ras1 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 ras1 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 ras1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### KappaB ras1 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.

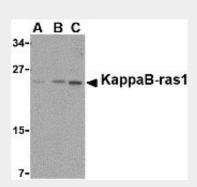
**Tissue Location** Widely expressed...

# KappaB ras1 Antibody - Protocols

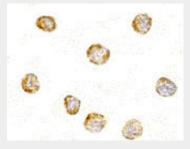
Provided below are standard protocols that you may find useful for product applications.

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

### KappaB ras1 Antibody - Images



Western blot analysis of KappaB ras1 in RAW264.7 cell lysate with KappaB ras1 antibody at (A) 0.5, (B) 1 and (C) 2  $\mu$ g/mL.



Immunocytochemistry of KappaB-ras1 in RAW264.7 cells with KappaB-ras1 antibody at 1 µg/mL.

# KappaB ras1 Antibody - Background

KappaB ras1 Antibody: KappaB ras-1 (κB-ras-1) and kappaB-ras-2 are two small proteins that similar to Ras-like small GTPases that associate with IκB (IκB), an inhibitor of the transcription factor NF-κB. IκB exists in two homologous forms, IκB-alpha and IκB-beta, although IκB-beta contains a unique 47-amino acid region within its ankyrin domain. While inactive IκB-alpha-NF-κB complexes





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can shuttle in and out of the nucleus, IkB-beta-NF-kB complexes are retained exclusively in the cytoplasm. It is suggested that kappaB-ras proteins preferentially bind to the IkB-beta form through this unique insert within the ankyrin region, thus modulating the cellular location of IkB-beta and regulating the rate of degradation of IkB-beta. This antibody is specific for kappaB-ras1 and has no cross-reactivity to kappaB-ras2.

# **KappaB ras1 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.