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KappaB ras2 Antibody

Catalog # ASC10151

Product Information

Application	WB, E
Primary Accession	Q9NYR9
Other Accession	NP_060065, 19072794
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	21508
Conjugate	Unconjugated
Application Notes	KappaB ras2 antibody can be used for detection of KappaB ras1 by Western blot at 1 □g/mL.

Additional Information

Gene ID	28511
Other Names	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℃ for three months and -20℃, 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.

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..

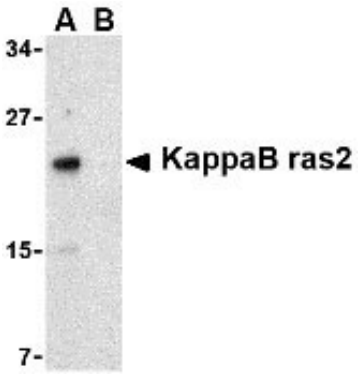
Background

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

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.

Images



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