

Anti-KB-RAS (RABBIT) Antibody
KB-RAS Antibody
Catalog # ASR5186

Specification

Anti-KB-RAS (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Rat, Human, Mouse
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	Anti-Kappa B Ras antibody has been tested for use in ELISA against the immunizing peptide. The antibody is likely suitable for western blotting and other immunoassays. Specific conditions must be optimized by the investigator.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to aa 179-192 of human KB-RAS. A single amino acid change of S190P exists in mouse.
Preservative	0.01% (w/v) Sodium Azide

Anti-KB-RAS (RABBIT) Antibody - Additional Information

Gene ID 28512

Other Names
28512

Purity

This is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-KB-RAS (RABBIT) 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..

Anti-KB-RAS (RABBIT) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-KB-RAS (RABBIT) Antibody - Images

Anti-KB-RAS (RABBIT) Antibody - Background

NFkB was originally identified as a factor that binds to the immunoglobulin kappa light chain enhancer in B cells. It was subsequently found in non-B cells in an inactive cytoplasmic form consisting of NFkB bound to IkB. Upon stimulation, IkB is phosphorylated and degraded, and then NF-kB translocates into the nucleus to activate the transcription of target genes. Two IkB proteins, IkB α and IkB β , exhibit divergent biochemical and genetic characteristics, exemplified by their different degradation kinetics. These differences indicate their distinctive physiological functions. Mutated forms of the small G-protein Ras are found in about 30% of all human cancers, including 95% of pancreatic and 50% of colon cancers. KB-RAS is the most commonly mutated form of Ras. KB-RAS was found to interact with the PEST domains of both IkB proteins in vitro. NFkB was originally identified as a heterodimeric DNA binding protein complex consisting of p65 (RelA) and p50 (NFKB1) subunits. Other identified subunits include p52 (NFKB2), c-Rel, and RelB. The p65, cRel, and RelB subunits are responsible for transactivation. The p50 and p52 subunits possess DNA binding activity but limited ability to transactivate. p52 has been reported to form transcriptionally active heterodimers with the NFkB subunit p65, similar to p50/p65 heterodimers. The heterodimers of p52/p65 and p50/p65 are regulated by physical inactivation in the cytoplasm by IkB-a. IkB-a binds to the p65 subunit, preventing nuclear localization and DNA binding. Low levels of p52 and p50 homodimers can also exist in cells.