

R1574P**Polyclonal Antibody to kb-Ras - Aff - Purified****Alternate names:**

KB RAS

Quantity:

0.1 mg

Concentration:

1.0 mg/ml (by UV absorbance at 280 nm)

Background:

NFκB 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 NFκB bound to IκB. Upon stimulation, IκB is phosphorylated and degraded, and then NF-κB translocates into the nucleus to activate the transcription of target genes. Two IκB proteins, IκBα and IκBβ, 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 IκB proteins in vitro. NFκB was originally identified as a heterodimeric DNA binding protein complex consisting of p65 (RelA) and p50 (NFκB1) subunits. Other identified subunits include p52 (NFκB2), 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 NFκB subunit p65, similar to p50/p65 heterodimers. The heterodimers of p52/p65 and p50/p65 are regulated by physical inactivation in the cytoplasm by IκB-α. IκB-α binds to the p65 subunit, preventing nuclear localization and DNA binding. Low levels of p52 and p50 homodimers can also exist in cells.

Host:

Rabbit

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.

AA Sequence:

L-P-G-R-K-N-K-G-N-S-N-S-E-N

Remarks: A single amino acid changes of S190P exists in mouse.

Format:

State: Liquid (sterile filtered) purified Ig fraction.

Purification: Immunoaffinity chromatography.

Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 with 0.01% (w/v) Sodium Azide as preservative.

Applications:

This affinity purified 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. This product has been assayed by ELISA against 0.1 μg of the immunizing peptide. A 1:10,000 to 1:50,000 dilution of the antibody is recommended for this assay.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

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

Storage:

Store vial at -20°C or below prior to opening. Dilute only prior to immediate use. Aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Shelf life: one year from despatch.

General Readings:

1. Fenwick C, Na SY, Voll RE, Zhong H, Im SY, Lee JW, et al. A subclass of Ras proteins that regulate the degradation of IkappaB. Science. 2000 Feb 4;287(5454):869-73. PubMed PMID: 10657303.