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KRAS2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16005b

Product Information

Application	WB, E
Primary Accession	P01116
Other Accession	P08644, P32883, NP_203524.1, NP_004976.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14572
Calculated MW	21656
Antigen Region	158-185

Additional Information

Gene ID	3845
Other Names	GTPase KRas, K-Ras 2, Ki-Ras, c-K-ras, c-Ki-ras, GTPase KRas, N-terminally processed, KRAS, KRAS2, RASK2
Target/Specificity	This KRAS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 158-185 amino acids from the C-terminal region of human KRAS2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KRAS2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRAS
Synonyms	KRAS2, RASK2

Function	Signal transducer in the Ras-MAPK signaling pathway that regulates cell proliferation and survival (PubMed:22711838, PubMed:23698361). Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (PubMed:20949621, PubMed:39809765). Activates MAPK1/MAPK3 resulting in phosphorylation and ultimately degradation of GJA1 (By similarity). Plays a role in promoting oncogenic events by inducing transcriptional silencing of tumor suppressor genes (TSGs) in colorectal cancer (CRC) cells in a ZNF304-dependent manner (PubMed:24623306). Recognized by LZTR1 that mediates its ubiquitination by a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex (PubMed:40934300).
Cellular Location	Cell membrane; Lipid-anchor; Cytoplasmic side. Endomembrane system. Cytoplasm
Tissue Location	Expressed throughout the epidermis, but weakly expressed in the stratum corneum and dermis (at protein level)

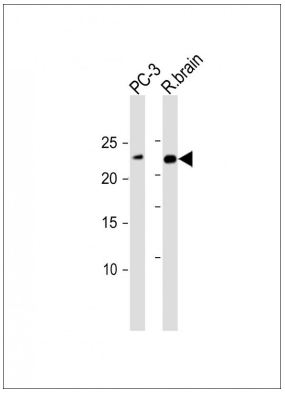
Background

This gene, a Kirsten ras oncogene homolog from the mammalian ras gene family, encodes a protein that is a member of the small GTPase superfamily. A single amino acid substitution is responsible for an activating mutation. The transforming protein that results is implicated in various malignancies, including lung adenocarcinoma, mucinous adenoma, ductal carcinoma of the pancreas and colorectal carcinoma. Alternative splicing leads to variants encoding two isoforms that differ in the C-terminal region.

References

Bruckman, K.C., et al. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 110(5):632-637(2010)
Wong, K.K., et al. Am. J. Pathol. 177(4):1611-1617(2010)
Irahara, N., et al. Diagn. Mol. Pathol. 19(3):157-163(2010)
Carotenuto, P., et al. Pharmacogenomics 11(8):1169-1179(2010)
Leventopoulos, G., et al. Clin. Exp. Rheumatol. 28(4):556-557(2010)

Images



All lanes: Anti-KRAS2 Antibody (C-term) at 1:1000 dilution
Lane 1: PC-3 whole cell lysate Lane 2: Rat brain lysate
Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 23 KDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.