

Product datasheet for AM50616PU-S

OriGene Technologies, Inc.

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KRAS Mouse Monoclonal Antibody [Clone ID: AT2F8]

Product data:

Product Type: Primary Antibodies

Clone Name: AT2F8

Applications: ELISA, FC, IF, WB

Recommended Dilution: The antibody has been tested by ELISA, Western blot analysis, ICC/IF and Flow cytometry to

assure specificity and reactivity. Since application varies, however, each investigation should

be titrated by the reagent to obtain optimal results.

Reactivity: Human Host: Mouse

Clonality: Monoclonal

Immunogen: Recombinant human KRAS (1-186aa) purified from E. coli.

Formulation: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol.

State: Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Protein-A affinity chromatography

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: KRAS proto-oncogene, GTPase

Database Link: Entrez Gene 3845 Human

P01116





Background:

KRAS acts as a molecular on/off switch. Once it is turned on, it recruits and activates proteins necessary for the propagation of growth factor and other receptors' sigl such as c-Raf and Pl 3-kise. KRAS binds to GTP in the active state and possesses an intrinsic enzymatic activity which cleaves the termil phosphate of the nucleotide converting it to GDP. Upon conversion of GTP to GDP, KRAS is turned off. The rate of conversion is usually slow but can be sped up dramatically by an accessory protein of the GTPase-activating protein (GAP) class, for example RasGAP. In turn KRAS can bind to proteins of the Guanine Nucleotide Exchange Factor (GEF) class, for example SOS1, which forces the release of bound nucleotide (GDP). Subsequently, KRAS binds GTP present in the cytosol and the GEF is released from ras-GTP.

Synonyms:

GTPase KRas, KRAS2, RASK2, K-Ras 2, Ki-Ras, c-K-ras, c-Ki-ras

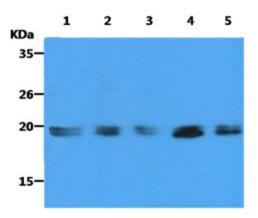
Protein Families:

Druggable Genome

Protein Pathways:

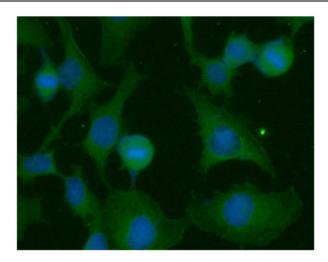
Acute myeloid leukemia, Axon guidance, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, Thyroid cancer, Tight junction, VEGF signaling pathway

Product images:



The Cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human KRAS antibody (1:500). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: HeLa cell lysate Lane 2.: HepG2 cell lysate Lane 3.: Ramos cell lysate Lane 4.: A549 cell lysate Lane 5.: Balb/3T3 cell lysate





ICC/IF analysis of KRAS in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human KRAS antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).