



Rabbit Anti-HRAS antibody

SL1071R

| | |
|-------------------------------|--|
| Product Name: | HRAS |
| Chinese Name: | 原癌基因H-ras抗体 |
| Alias: | c bas/has; c H ras; c has/bas p21 protein; C K RAS; c K ras2 protein; c Ki ras; c Kirsten ras protein; c ras Ki 2 protein; Cellular c Ki ras2 proto oncogene antibody G1III6 N ras; GTPase HRas; GTPase KRas; GTPase NRas; H Ras 1; H RasIDX; Ha Ras; HRAS 1; HRAS; HRAS1; K Ras 2; K ras; K ras p21 protein; K RAS2A; K RAS2B; K RAS4A; K RAS4B; KI RAS; Kirsten rat sarcoma 2 viral (v Ki ras2) oncogene homolog; KRAS 1; KRAS 2; KRAS; KRAS1; KRAS2; N ras; N ras oncogene; Neuroblastoma RAS viral (v ras) oncogene homolog; NRAS 1; NRAS; NRAS1; NS3; Oncogene KRAS2; p21ras; PR310 c K ras oncogene antibody RASH 1; RASH1; RASK 2; RASK2; Transforming protein N Ras; Transforming protein p21; v Ha ras Harvey rat sarcoma viral oncogene homolog; v Ki ras2 Kirsten rat sarcoma 2 viral oncogene homolog; v Ki ras2 Kirsten rat sarcoma viral oncogene homolog; v ras neuroblastoma RAS viral oncogene homolog; RASH HUMAN. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Chicken,Rabbit, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 21kDa |
| Cellular localization: | The nucleuscytoplasmicThe cell membrane |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human H-ras:101-152/152 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized |

| | |
|------------------------|--|
| | antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | <p>This gene belongs to the Ras oncogene family, whose members are related to the transforming genes of mammalian sarcoma retroviruses. The products encoded by these genes function in signal transduction pathways. These proteins can bind GTP and GDP, and they have intrinsic GTPase activity. This protein undergoes a continuous cycle of de- and re-palmitoylation, which regulates its rapid exchange between the plasma membrane and the Golgi apparatus. Mutations in this gene cause Costello syndrome, a disease characterized by increased growth at the prenatal stage, growth deficiency at the postnatal stage, predisposition to tumor formation, mental retardation, skin and musculoskeletal abnormalities, distinctive facial appearance and cardiovascular abnormalities. Defects in this gene are implicated in a variety of cancers, including bladder cancer, follicular thyroid cancer, and oral squamous cell carcinoma. Multiple transcript variants, which encode different isoforms, have been identified for this gene. [provided by RefSeq].</p> <p>Function: Ras proteins bind GDP/GTP and possess intrinsic GTPase activity.</p> <p>Subunit: In its GTP-bound form interacts with PLCE1. Interacts with TBC1D10C. Interacts with RGL3. Interacts with HSPD1. Found in a complex with at least BRAF, HRAS1, MAP2K1, MAPK3 and RGS14. Interacts (active GTP-bound form) with RGS14 (via RBD 1 domain) (By similarity). Forms a signaling complex with RASGRP1 and DGKZ. Interacts with RASSF5. Interacts with PDE6D. Interacts with IKZF3. Interacts with GNB2L1.</p> <p>Subcellular Location: Cell membrane. Cell membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus. Golgi apparatus membrane; Lipid-anchor. Note=The active GTP-bound form is localized most strongly to membranes than the inactive GDP-bound form (By similarity). Shuttles between the plasma membrane and the Golgi apparatus. Isoform 2: Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Note=Colocalizes with GNB2L1 to the perinuclear region.</p> <p>Tissue Specificity: Widely expressed.</p> <p>Post-translational modifications: Palmitoylated by the ZDHHC9-GOLGA7 complex. A continuous cycle of de- and re-palmitoylation regulates rapid exchange between plasma membrane and Golgi. S-nitrosylated; critical for redox regulation. Important for stimulating guanine nucleotide exchange. No structural perturbation on nitrosylation. The covalent modification of cysteine by 15-deoxy-Delta 12,14-prostaglandin-J2 is</p> |

autocatalytic and reversible. It may occur as an alternative to other cysteine modifications, such as S-nitrosylation and S-palmitoylation.

Acetylation at Lys-104 prevents interaction with guanine nucleotide exchange factors (GEFs) (By similarity).

DISEASE:

Faciocutaneous skeletal syndrome (FCSS) [MIM:218040]: A rare condition characterized by prenatally increased growth, postnatal growth deficiency, mental retardation, distinctive facial appearance, cardiovascular abnormalities (typically pulmonary stenosis, hypertrophic cardiomyopathy and/or atrial tachycardia), tumor predisposition, skin and musculoskeletal abnormalities. Note=The disease is caused by mutations affecting the gene represented in this entry.

Congenital myopathy with excess of muscle spindles (CMEMS) [MIM:218040]: Variant of Costello syndrome. Note=The disease is caused by mutations affecting the gene represented in this entry.

Hürthle cell thyroid carcinoma (HCTC) [MIM:607464]: A rare type of thyroid cancer accounting for only about 3-10% of all differentiated thyroid cancers. These neoplasms are considered a variant of follicular carcinoma of the thyroid and are referred to as follicular carcinoma, oxyphilic type. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

Note=Mutations which change positions 12, 13 or 61 activate the potential of HRAS to transform cultured cells and are implicated in a variety of human tumors.

Bladder cancer (BLC) [MIM:109800]: A malignancy originating in tissues of the urinary bladder. It often presents with multiple tumors appearing at different times and at different sites in the bladder. Most bladder cancers are transitional cell carcinomas that begin in cells that normally make up the inner lining of the bladder. Other types of bladder cancer include squamous cell carcinoma (cancer that begins in thin, flat cells) and adenocarcinoma (cancer that begins in cells that make and release mucus and other fluids). Bladder cancer is a complex disorder with both genetic and environmental influences. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

Note=Defects in HRAS are the cause of oral squamous cell carcinoma (OSCC).

Schimmelpenning-Feuerstein-Mims syndrome (SFM) [MIM:163200]: A disease characterized by sebaceous nevi, often on the face, associated with variable ipsilateral abnormalities of the central nervous system, ocular anomalies, and skeletal defects. Many oral manifestations have been reported, not only including hypoplastic and malformed teeth, and mucosal papillomatosis, but also ankyloglossia, hemihyperplastic tongue, intraoral nevus, giant cell granuloma, ameloblastoma, bone cysts, follicular cysts, oligodontia, and odontodysplasia. Sebaceous nevi follow the lines of Blaschko and these can continue as linear intraoral lesions, as in mucosal papillomatosis. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the small GTPase superfamily. Ras family.

SWISS:

P01112

Gene ID:
3265

Database links:

[Entrez Gene: 3265](#) Human

[Entrez Gene: 15461](#) Mouse

[Entrez Gene: 293621](#) Rat

[Omim: 190020](#) Human

[SwissProt: P01112](#) Human

[SwissProt: Q61411](#) Mouse

[SwissProt: P20171](#) Rat

[Unigene: 37003](#) Human

[Unigene: 334313](#) Mouse

[Unigene: 102180](#) Rat

Important Note:

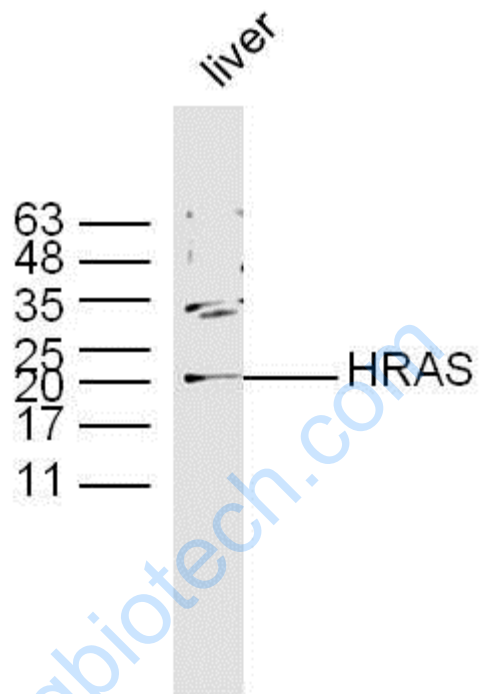
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

GDP/GTPBinding protein(GDP/GTP Bijding Protein)

细胞Signal

transduction系统紊乱是Tumour细胞生长的重要特征之一, Ras蛋白参与体内多种细胞Signal transduction途径而发挥作用,而原癌基因H-ras是一种多功能的cell factor, 广泛存在于自然界, H-ras在多种细胞生命活动中起极为重要的作用, 包括细胞的增殖、分化和Cytoskeleton的构建等等, 该抗体主要用于Tumour方面的研究。

Picture:



Sample:

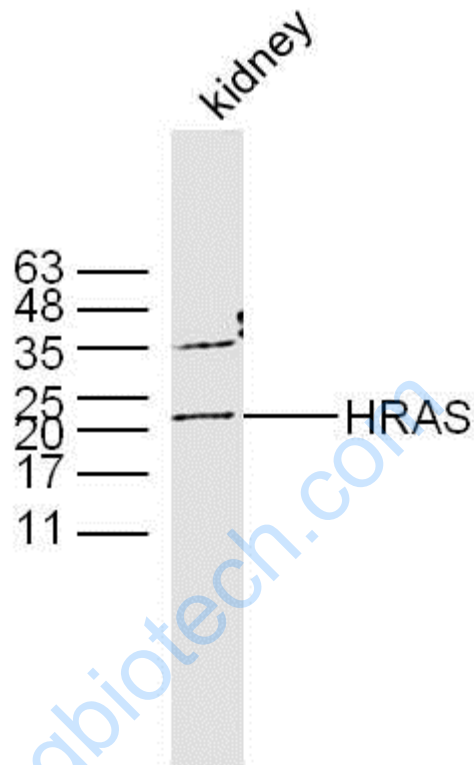
Liver (Mouse) Lysate at 40 ug

Primary: Anti-HRAS (SL1071R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 21 kD

Observed band size: 21 kD



Sample:

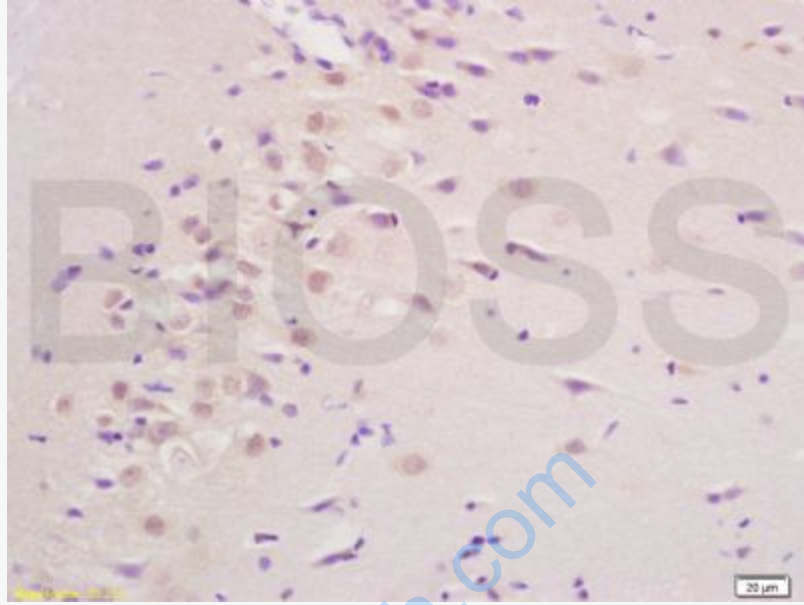
Kidney (Mouse) Lysate at 40 ug

Primary: Anti-HRAS (SL1071R) at 1/300 dilution

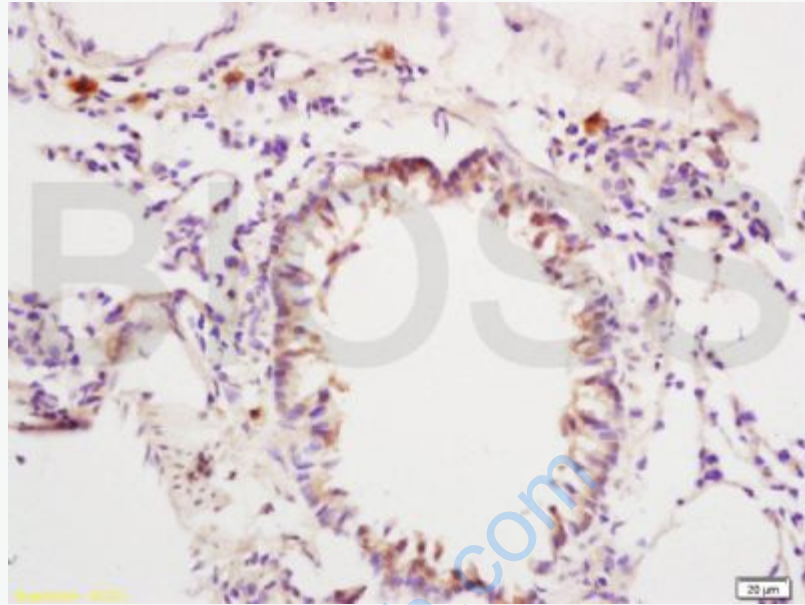
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 21 kD

Observed band size: 21 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-HRAS/Ras/Ras p21 Polyclonal Antibody, Unconjugated(SL1071R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-HRAS/Ras/Ras p21 Polyclonal Antibody, Unconjugated(SL1071R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining