

Anti-GTPase HRAS Picoband Antibody

Catalog # ABO10021

Specification

Anti-GTPase HRAS Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP01112HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for GTPase Hras(HRAS) detection. Tested with WB inHuman;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GTPase HRAS Picoband Antibody - Additional Information

Gene ID 3265

Other Names GTPase HRas, H-Ras-1, Ha-Ras, Transforming protein p21, c-H-ras, p21ras, GTPase HRas, N-terminally processed, HRAS, HRAS1

Calculated MW 21298 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

Cell membrane. Cell membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus. Golgi apparatus membrane; Lipid-anchor. 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. .

Tissue Specificity Widely expressed. .

Protein Name GTPase Hras

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human GTPase HRAS



(111-137aa MVLVGNKCDLAARTVESRQAQDLARSY), identical to the related mouse and rat sequences.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-GTPase HRAS Picoband Antibody - Protein Information

Name HRAS

Synonyms HRAS1

Function

Involved in the activation of Ras protein signal transduction (PubMed:22821884). Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (PubMed:12740440, PubMed:12740440, PubMed:14500341, PubMed:9020151).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P20171}; 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.

Tissue Location Widely expressed..

Anti-GTPase HRAS Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-GTPase HRAS Picoband Antibody - Images



Western blot analysis of GTPase HRAS expression in rat brain extract (lane 1), mouse brain extract (lane 2) and A549 whole cell lysates (lane 3). GTPase HRAS at 21KD was detected using rabbit anti- GTPase HRAS Antigen Affinity purified polyclonal antibody (Catalog # ABO10021) at 0.5 $\hat{1}_{4}$ g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-GTPase HRAS Picoband Antibody - Background

GTPase HRas, also known as transforming protein p21, is an enzyme that in humans is encoded by the HRAS gene. 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.