

Anti-GTPase HRAS Picoband Antibody

Catalog # ABO10021

Product Information

Application	WB
Primary Accession	P01112
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for GTPase Hras(HRAS) detection. Tested with WB in Human;Mouse;Rat.

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

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
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. .
Source	Eukaryota
Protein Name	GTPase Hras
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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 reconstitution, 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.
----------------	--

Protein Information

Name	HRAS
Synonyms	HRAS1
Function	Signal transducer in the Ras-MAPK signaling pathway that regulates cell proliferation and survival (PubMed: 22821884). Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (PubMed: 12740440 , PubMed: 14500341 , PubMed: 9020151). Recognized by LZTR1 that mediates its ubiquitination by a BCR (BTB-CUL3-RBX1) E3 ubiquitin- protein ligase complex (PubMed: 40934300).
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..

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.

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 µg/mL. The blot was developed using chemiluminescence (ECL) method .