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Rabbit Polyclonal GTPase HRAS antibody

Catalog Number: P21RAS-101AP

Lot Number:

General Information

Product	GTPase HRAS Antibody
Description	Affinity Purified Transforming p21 Ras Antibody N-epitope
Accession #	Uniprot: P01112 GenBank: NP_005334.1
Verified Applications	ELISA, IP, WB
Species Cross Reactivity	Chicken, Human, Mouse, Rat, Drosophila
Host	Rabbit
Immunogen	Synthetic peptide taken within amino acid region 1-50 on human GTPase HRAS protein.
Alternative Nomenclature	c has/bas p21 protein antibody, c ras Ki 2 protein antibody, c-H-ras antibody, CTLO antibody, G1III6 N ras antibody, GTP and GDP binding peptide B antibody, H Ras 1 antibody, HAMSV antibody, Harvey rat sarcoma viral oncoprotein antibody, HRAS1 antibod, K ras antibody, N ras antibody, p21ras antibody, Ras family small GTP binding protein H Ras antibody, RASH1 antibody, Transformation gene oncogene HAMSV antibody, VH Ras antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.7 mg/ml IgG in antibody stabilization buffer
Determinant	N-epitope
Storage	Store at -20ºC for long term storage.

Recommended Dilutions

DOT Blot	1:10,000
ELISA	1:10,000
Immunoprecipitation	1:200
Western Blot	1:500

Related Products	Catalog #
Mid-Region Epitope	P21RAS-112AP
C-epitope	P21RAS-121AP
BIOTIN-Conjugated	P21RAS-BIOTIN
FITC-Conjugated	P21RAS-FITC
Antigenic Blocking Peptide	P-P21RAS
Western Blot Positive Control	PC-P21RAS

Overview:

The small G protein p21Ras is a key signal transducer mediating cellular growth and proliferation responses to extracellular stimuli. The low molecular weight GTP binding protein P21ras is encoded by the ras proto-oncogene and serves as a molecular switch between extracellular signal and the plasma membranes to the nucleus of the cell. Ras proteins can differentially bind GTP or GDP. A GTP bond ras is biologically active generating biological response. Upon activation by GTP coupling, the p21ras can elicit its signal transduction via various pathway including activation of ra-1, MEK and ERK kinases (1). The hyperactivity of p21ras led to neuronal hypertrophy and profound alterations in dendritic spine densities in brain (2). Human tumors frequently harbor mutated p21ras alleles that encode a p21ras that is preferentially bound to GTP and therefore constitutively active. Furthermore, mutant p21ras induces cellular transformation of cultured cells, a biological response that is considered to reflect a step in carcinogenesis. This biological response is propagated by the effector molecules of p21ras.

The anti-p21RAS selective antibodies were made against an epitope that lies near the N-terminus of GTPase HRAS protein. The antibodies are affinity purified on an immobilized antigen based affinity matrix. The isolated antibodies were then stabilized in antibody stabilization buffer for long-term storage. Antigenic blocking peptides (P-P21RAS) and western blot positive controls (PC-P21RAS) are available. Antibodies can be conjugated to secondary enzymes or fluorophores upon request at nominal costs. For a complete listing of all FabGennix products and services please visit http://fabgennix.com.

References

1. Seeger G, Gartner U, Holzer M, Arendt T. Constitutive expression of p21H-Ras(Val12) in neurons induces increased axonal size and dendritic microtubule density in vivo. J Neurosci Res. 2003 Dec 15;74(6):868-74.
2. Hollmann, Markus W., et al. "Receptors, G proteins, and their interactions."The Journal of the American Society of Anesthesiologists 103.5 (2005): 1066-1078.

* For users who may require large amounts of the products listed above, please inquire about bulk material discounts.
This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.