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Rho B Rabbit pAb

Catalog # AP99739

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P62745
Other Accession	P62745
Reactivity	Human
Predicted	Rat, Mouse, Rabbit, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22123
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Rho B
Epitope Specificity	101-196/196
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the small GTPase superfamily. Rho family.
SUBUNIT	Binds ROCK1 and ROCK2. Also binds PKN1/PRK1. Interacts with ARGGEF3, RTKN and AKAP13.
Post-translational modifications	Prenylation specifies the subcellular location of RHOB. The farnesylated form is localized to the plasma membrane while the geranylgeranylated form is localized to the endosome.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The Rho proteins interact directly with protein kinases which are likely to serve as downstream effector targets of the activated GTPase. The Rho family of GTPases are involved in the regulation of the actin skeleton. Activation of Rho to the GTP bound state promotes formation of stress fibers and is required for the formation and maintenance of focal adhesions. Pathways stimulated by cytokines, hormones and various forms of stress utilize p21 proteins of the Rho family. Possible mediators for these responses include protein kinase such as p120PKN, and p150 ROKa/Rho-A kinase, myosin light chain (MLC) phosphatase and PIP 5-kinase.

Additional Information

Gene ID	388
Other Names	ARH6; ARHB; MST081; MSTP081; RHOH6; RHOB_BOVIN; RHOB; RHOB_HUMAN; Rho cDNA clone 6 (h6); RHOB_MOUSE; RHOB_RAT; ras homolog family member B; ras homolog gene family, member B; oncogene RHO H6
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	RHOB
Synonyms	ARH6, ARHB
Function	Mediates apoptosis in neoplastically transformed cells after DNA damage. Not essential for development but affects cell adhesion and growth factor signaling in transformed cells. Plays a negative role in tumorigenesis as deletion causes tumor formation. Involved in intracellular protein trafficking of a number of proteins. Targets PKN1 to endosomes and is involved in trafficking of the EGF receptor from late endosomes to lysosomes. Also required for stability and nuclear trafficking of AKT1/AKT which promotes endothelial cell survival during vascular development. Serves as a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Required for genotoxic stress-induced cell death in breast cancer cells.
Cellular Location	Late endosome membrane; Lipid-anchor. Cell membrane; Lipid-anchor. Nucleus. Cleavage furrow. Note=Late endosomal membrane (geranylgeranylated form). Plasma membrane (farnesylated form). Also detected at the nuclear margin and in the nucleus Translocates to the equatorial region before furrow formation in a ECT2-dependent manner

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.