

Rabbit Anti-Rho B antibody

SL11142R

Product Name:	Rho B
Chinese Name:	RhoB蛋白抗体
Alias:	Rh -related GTP binding protein RhoB; Rh -related GTP binding protein RhoC; RHOH6; Transforming protein RhoA; AA017882 antibody Aplysia ras related homolog 9 (RhoC); ARH9; ARHA; ARHB; ARHC; H6; MST081; MSTP08; Oncogene RHO H9; rhoC GTPase; Ras homolog 9 (RhoC); Ras homolog gene family, member A; Ras homolog gene family, member B; Ras homolog gene family, member C; Rho related GTP binding protein RhoC; RHO12; RHOB; RHOC; RHOH9; RP11-426L16.4; Small GTP binding protein RhoC; H9; Rho related GTP binding protein RhoB; ARH12; ARH6; H12.RHOB_HUMAN
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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:	22kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Rho B:101-196/196
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:	<u>PubMed</u>

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.

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.

Subunit:

Product Detail:

Binds ROCK1 and ROCK2. Also binds PKN1/PRK1. Interacts with ARGGEF3, RTKN and AKAP13.

Subcellular Location:

Rho A: Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm; cytoskeleton. Rho B: Late endosome membrane; Lipid-anchor. Cell membrane; Lipid-anchor. Nucleus. Rho C: Cell membrane; Lipid-anchor; Cytoplasmic side.

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.

Similarity:

Belongs to the small GTPase superfamily. Rho family.

SWISS:

P62745

Gene ID:

388

Database links:

Entrez Gene: 395734Chicken

Entrez Gene: 515118Cow

Entrez Gene: 388Human

Entrez Gene: 11852 Mouse

Entrez Gene: 100144503Pig

Entrez Gene: 64373Rat

Omim: 165370Human

SwissProt: Q3ZBW5Cow

SwissProt: P62745Human

SwissProt: P62746Mouse

SwissProt: P62747Rat

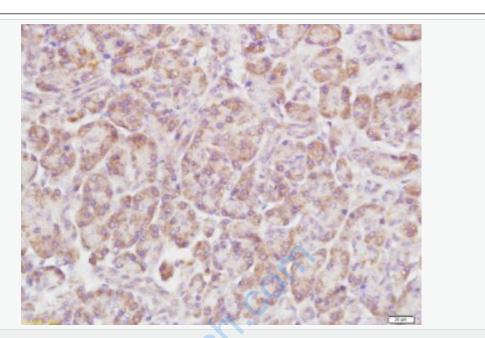
Unigene: 502876Human

Unigene: 687 Mouse

Unigene: 2042Rat

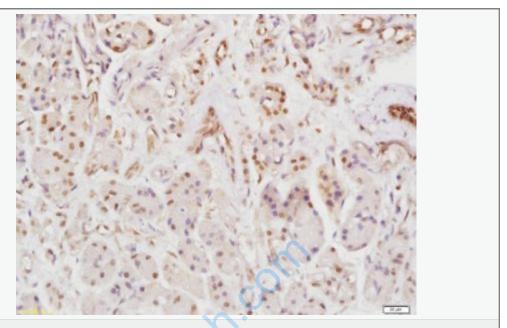
Important Note:

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



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human pancreatic cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Rho B) Polyclonal Antibody, Unconjugated (SL11142R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



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