

Product name:	Rho B Rabbit Polyclonal Antibody
Cat number:	ABN17121
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human RHOB. AA range:99-148
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight:	22kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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., miscellaneous: RHOB is one of the targets of farnesyltransferase inhibitors which are currently under investigation as cancer therapeutics. These elevate the levels of geranylgeranylated RHOB and cause mislocalization, leading to apoptosis and antineoplastic effects., PTM: 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., subcellular location: Late endosomal membrane (geranylgeranylated form). Plasma membrane (farnesylated form). Also detected at the nuclear margin and in the nucleus., subunit: Binds ROCK1 and ROCK2. Also binds PKN1/PRK1. Interacts with ARGGEF3, RTKN and AKAP13., 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., miscellaneous: RHOB is one of the targets of farnesyltransferase inhibitors which are currently under investigation as cancer therapeutics. These elevate the levels of geranylgeranylated RHOB and cause mislocalization, leading to apoptosis and antineoplastic effects., PTM: 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., subcellular location: Late endosomal membrane (geranylgeranylated form). Plasma membrane (farnesylated form). Also detected at the nuclear margin and in the nucleus., subunit: Binds ROCK1 and ROCK2. Also binds PKN1/PRK1. Interacts with ARGGEF3, RTKN and AKAP13.,