

**Product Name: Rho B Rabbit Polyclonal Antibody****Catalog #: APRab17121**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
<b>Molecular Weight</b>	22kDa

**Antigen Information**

<b>Gene Name</b>	RHOB
<b>Alternative Names</b>	RHOB; ARH6; ARHB; Rho-related GTP-binding protein RhoB; Rho cDNA clone 6; h6
<b>Gene ID</b>	388.0
<b>SwissProt ID</b>	P62745
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human RHOB. AA range:99-148

**Background**

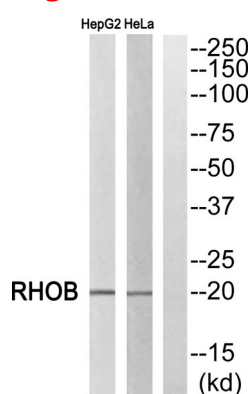
function:Mediates apoptosis in neoplastically transformed cells after DNA damage. Not essential for development but affects

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

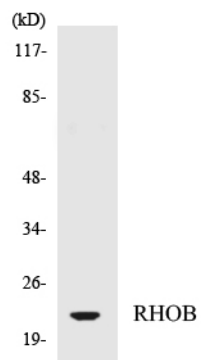
## Research Area

Signal Transduction; Cytoskeleton / ECM; Cytoskeleton; Microfilaments; Actin etc; Actin Assembly; Signaling Pathway; G Protein Signaling; Small G Proteins; Ras Family; Protein Trafficking; Vesicle Transport; Regulation

## Image Data



Western blot analysis of RHOB Antibody. The lane on the right is blocked with the RHOB peptide.



Western blot analysis of the lysates from HepG2 cells using RHOB antibody.