10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ARHB Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12264c

Product Information

Application	IHC-P, WB, E
Primary Accession	P62745
Other Accession	P62747, P62746, Q3ZBW5, NP_004031.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14498
Calculated MW	22123
Antigen Region	104-137

Additional Information

Gene ID	388
Other Names	Rho-related GTP-binding protein RhoB, Rho cDNA clone 6, h6, RHOB, ARH6, ARHB
Target/Specificity	This ARHB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 104-137 amino acids from the Central region of human ARHB.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ARHB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

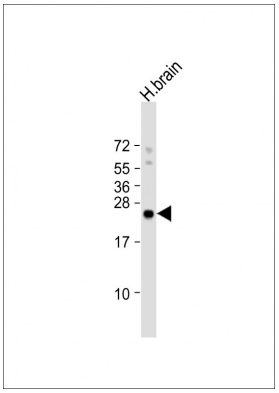
Background

ARHB 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.

References

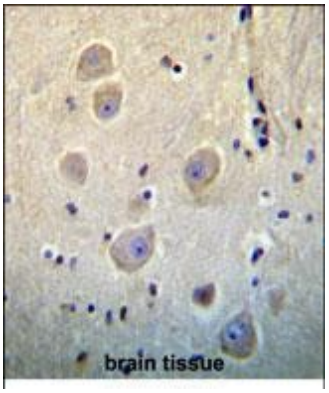
Adly, M.A., et al. J. Cutan. Pathol. 37(7):751-757(2010)
Connolly, E.C., et al. Mol. Cancer Res. 8(5):691-700(2010)
Zintzaras, E., et al. Am. J. Epidemiol. 171(8):851-858(2010)
Kim, C.H., et al. Biochem. Biophys. Res. Commun. 391(2):1182-1186(2010)
Takefuji, M., et al. J. Hum. Genet. 55(1):42-49(2010)

Images



Anti-ARHB Antibody (Center) at 1:4000 dilution + human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ARHB Antibody (Center) (Cat. #AP12264c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ARHB Antibody (Center) for



immunohistochemistry. Clinical relevance has not been evaluated.