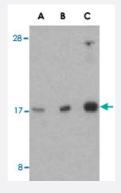


RHEB polyclonal antibody

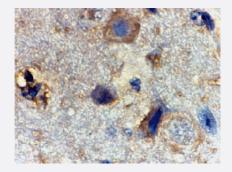
Catalog # PAB13143 Size 100 ug

Applications



Western Blot (Tissue lysate)

Western blot analysis of RHEB in mouse brain tissue lysate with RHEB polyclonal antibody (Cat # PAB13143) at (A) 1, (B) 2, and (C) 4 ug/mL .



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemistry of RHEB in mouse brain tissue with RHEB polyclonal antibody (Cat # PAB13143) at 2 ug/mL .

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of RHEB.
Immunogen	A synthetic peptide corresponding to internal region 15 amino acids of human RHEB.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Form	Liquid
Recommend Usage	Western Blot (1 ug/mL) The optimal working dilution should be determined by the end user.



Product Information

Storage Buffer	In PBS (0.02% sodium azide)
Storage Instruction	Store at 4°C for three months. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Western Blot (Tissue lysate)

Western blot analysis of RHEB in mouse brain tissue lysate with RHEB polyclonal antibody (Cat # PAB13143) at (A) 1, (B) 2, and (C) 4 ug/mL.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

 $Immun ohistochem is try of RHEB in mouse brain tissue with RHEB polyclonal antibody (Cat \# PAB13143) at 2 ug/mL \ .$

Gene Info — RHEB	
Entrez GenelD	6009
Protein Accession#	AAH16155
Gene Name	RHEB
Gene Alias	MGC111559, RHEB2
Gene Description	Ras homolog enriched in brain
Omim ID	601293
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene is a member of the small GTPase superfamily and encodes a lipid-anchored, cell mem brane protein with five repeats of the RAS-related GTP-binding region. This protein is vital in regul ation of growth and cell cycle progression due to its role in the insulin/TOR/S6K signaling pathway . The protein has GTPase activity and shuttles between a GDP-bound form and a GTP-bound for m, and farnesylation of the protein is required for this activity. Three pseudogenes have been map ped, two on chromosome 10 and one on chromosome 22. [provided by RefSeq
Other Designations	GTP-binding protein Rheb Ras homolog enriched in brain 2

Publication Reference



Rheb GTPase is a direct target of TSC2 GAP activity and regulates mTOR signaling.

Inoki K, Li Y, Xu T, Guan KL.

Genes & Development 2003 Jul; 17(15):1829.

Rheb is an essential regulator of S6K in controlling cell growth in Drosophila.

Stocker H, Radimerski T, Schindelholz B, Wittwer F, Belawat P, Daram P, Breuer S, Thomas G, Hafen E. Nature Cell Biology 2003 Jun; 5(6):559.

• rheb, a growth factor- and synaptic activity-regulated gene, encodes a novel Ras-related protein.

Yamagata K, Sanders LK, Kaufmann WE, Yee W, Barnes CA, Nathans D, Worley PF.

The Journal of Biological Chemistry 1994 Jun; 269(23):16333.

Pathway

- Insulin signaling pathway
- mTOR signaling pathway

Disease

- Genetic Predisposition to Disease
- Urinary Bladder Neoplasms