

RHEB(Y35N)

Catalog Number: 26338

Gene Symbol: RHEB

Description: Anti-RHEB(Y35N) Mouse Monoclonal Antibody

Background: RheB(Ras Homolog Enriched in Brain) is an evolutionarily conserved member of the Ras-family of small GTP-binding proteins originally found to be rapidly induced by synaptic activity in the hippocampus following seizure. While it is expressed at relatively high levels in the brain, RheB is widely expressed in other tissues and may be induced by growth factor stimulation. RheB has an important role in regulating the insulin/TOR signaling pathway. The mammalian target of rapamycin, mTOR, is a serine/threonine protein kinase that acts as a sensor for ATP and amino acids, balancing the availability of nutrients with translation and cell growth. The tuberlin/hamartin (TSC2/TSC1) complex inhibits mTOR activity indirectly by inhibiting RheB via tuberlin's GAP activity.

Immunogen: A synthetic peptide from the internal region of RHEB, which includes the mutation of Y35N, human origin.

Tested Applications: ELISA, WB, IHC

Recommended Dilutions:

ELISA: 1:1000-1:2000

WB: 1:500-1:1000

IHC: 1:50-1:100

Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal

Purity: Purified from ascites

Format: Liquid

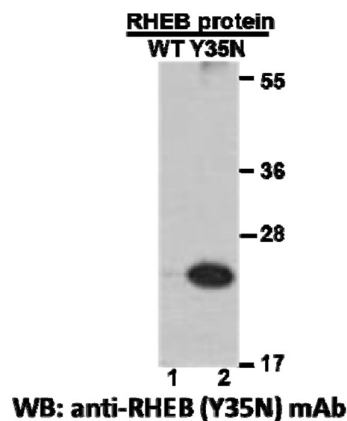
Preservative: No

Constituents: PBS (without Mg^{2+} and Ca^{2+}), pH 7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: Recognizes Y35N mutant, but not wild-type RHEB of vertebrates.

Storage Conditions: Store at $-20^{\circ}C$. Avoid freeze / thaw cycles.

Western blot:

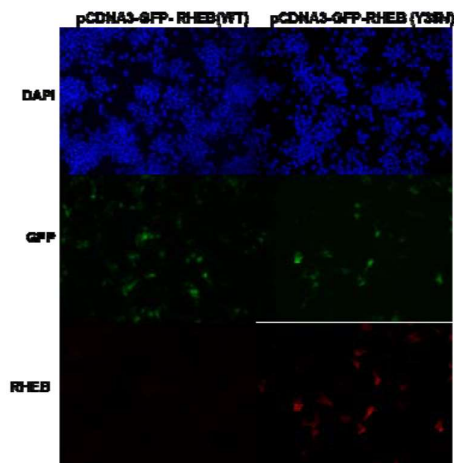


Western blot analysis of recombinant RHEB(Y35N) and wildtype proteins.

Purified His-tagged RHEB(Y35N) protein (lane 2) and corresponding wild-type protein (lane 1) were blotted with anti-RHEB(Y35N) monoclonal antibody (Cat. # 26338).

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Immunofluorescence:



Immunofluorescence of cells expressing RHEB proteins with anti-RHEB(Y35N) antibody.

HEK293T cells were transfected with pCDNA3-GFP-RHEB(WT) plasmid (left column) or pCDNA3-GFP-RHEB(Y35N) plasmid (right column), then fixed and stained with anti-RHEB(Y35N) monoclonal antibody (Cat. # 26338).

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