

## Rheb Antibody

Ras Homolog Enriched in Brain (Rheb) is an evolutionarily conserved member of the Ras family of small GTP-binding proteins originally found to be highly expressed in brain. Rheb is widely represented in other tissues and may be induced by growth factor stimulation. Biochemical and genetic studies demonstrate that Rheb has an important role in regulating the insulin/mTOR signaling pathway and plays an important role in regulating cellular growth. The tuberin/hamartin (TSC2/ TSC1) complex inhibits mTOR activity indirectly by inhibiting Rheb via tuberin's GAP activity.

**Catalog Number**: E1S0005-1, E1S0005-2

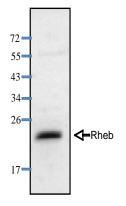
**Quantity**: 50ug/50uL, 100ug/100uL

**Specificity/Sensitivity:** Rheb Antibody detects endogenous levels of total Rheb on Western analysis and do not cross-react with other Ras family proteins.

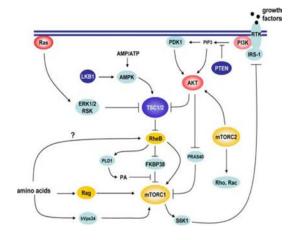
**Source/Purification:** Polyclonal antibodies are produced by immunizing rabbits with a bacterially expressed human Rheb. Antibodies are purified by protein A chromatography.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
WB, IP	H, Mu, R, Monkey	~21 Kd	Rabbit Polyclonal

\* Based on sequence homology



Western blot analysis of protein extracts from 293 cells overexpressing a mouse Rheb cDNA. The primary antibody was diluted 1:2000 before applied to the blotting membrane. (Right Panel: a schematic illustration of mTOR signaling pathway.)



Recommended Antibody Dilutions: **Immuoprecipitation**: 1:100-200;

Western Blotting: 1:1,000-2,000. Antibody diluent: PBST-5% non-fat milk or BSA. Storage condition: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100  $\mu$ g/ml BSA and 50% glycerol. Stable for at least 6-months if stored at  $-20^{\circ}$ C.