TSC2 Antibody

Subcategory: Rabbit Polyclonal Antibody
Cat. No.: 253530
Unit: 0.1 mg

Description:
Tuberous sclerosis complex (TSC) is an autosomal dominant tumor syndrome caused by mutations in either of the TSC1 or TSC2 tumor suppressor genes. The products of these genes form a protein complex that indirectly decreases the signaling of the mammalian Target of Rapamycin (TOR), an evolutionarily conserved serine/threonine kinase that regulates cell growth and cell cycle through its ability to integrate signals from nutrient levels and growth factors. TOR activity is stimulated by Rheb, a member of the Ras superfamily of G-proteins, when the GTP/GDP ratio bound to Rheb is high. Immunoprecipitated TSC1/TSC2 has been shown to stimulate Rheb GTPase activity in vitro, suggesting that the TSC1/TSC2 complex decreases the ability of Rheb to stimulate TOR activity. This is supported by experiments showing that overexpression of TSC1 and TSC2 results in a significant decrease in the GTP/GDP ratio bound to Rheb and the inhibition of cell growth. At least three isoforms of TSC2 exist.

Isotype: Rabbit Ig
Applications: E, WB
Species Reactivity: H, M
Format: Each vial contains 0.1 ml IgG in PBS pH 7.4 with 0.02% sodium azide. Antibody was purified by immunogen affinity chromatography.
Alternate Names: TSC2 ; Tuberous sclerosis complex 2; Tuberin
Accession No.: NP_000539

Antigen: KLH-conjugated synthetic peptide encompassing a sequence within human TSC2.
Application Notes: E: 1:500-1:1,000; WB: 1:100-1:500

Storage: Store at -20°C. Minimize freeze-thaw cycles. Product is guaranteed one year from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.