Product Datasheet

Tuberin Antibody

Catalog No: CY5601 Reactivity: Human Mouse Rat

Isotype: Rabbit IgG Applications: WB IHC FC



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Information

UniProt ID: P49815

All Names: TSC2; Tuberous sclerosis 2 homolog protein; Tuberous sclerosis 2 protein; Tuberin;

Form: Liquid

Storage instructions: Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Storage buffer: pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Purity: Affinity-chromatography **Immunogen:** A synthesized peptide

Molecular Wt.: 200 kDa

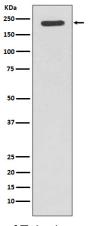
Application

WB: 1:500~1:2000 IHC: 1:50~1:200

FC: 1:50

Background

Tuberin is a product of the TSC2 tumor suppressor gene and an important regulator of cell proliferation and tumor development (1). Mutations in either TSC2 or the related TSC1 (hamartin) gene cause tuberous sclerosis complex (TSC), an autosomal dominant disorder characterized by development of multiple, widespread non-malignant tumors (2). Tuberin is directly phosphorylated at Thr1462 by Akt/PKB (3). Phosphorylation at Thr1462 and Tyr1571 regulates tuberin-hamartin complexes and tuberin activity (3-5). In addition, tuberin inhibits the mammalian target of rapamycin (mTOR), which promotes inhibition of p70 S6 kinase, activation of eukaryotic initiation factor 4E binding protein 1 (4E-BP1, an inhibitor of translation initiation), and eventual inhibition of translation (3,6,7).



Western blot analysis of Tuberin expression in Jurkat cell lysate.

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