Background

Tuberous sclerosis complex (TSC) is an autosomal dominant genetic disorder characterized by mental retardation and the widespread development of distinctive tumors termed hamartomas. Two different genetic loci have been linked to TSC; one of these loci, the tuberous sclerosis-2 gene (TSC2), encodes a protein called tuberin and the other loci, tuberous sclerosis-1 gene (TSC1), encodes a protein called hamartin. Tuberin and hamartin interact with each other forming a cytoplasmic complex. Hamartin interacts with the ezrin-radixin-moesin (ERM) family of actin-binding proteins and inhibition of hamartin activity results in loss of cell adhesion. Hamartin is present in most adult tissues with strong expression in brain, heart, and kidney.

Chromosomal location

Genetic locus: TSC1 (human) mapping to 9q34.13; Tsc1 (mouse) mapping to 2 A3.

Source

Hamartin (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of hamartin of human origin.

Product

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Applications

Hamartin (H-300) is recommended for detection of hamartin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Hamartin (H-300) is also recommended for detection of hamartin in additional species, including equine and canine.

Suitable for use as control antibody for hamartin siRNA (h): sc-37437, hamartin siRNA (m): sc-37438, hamartin shRNA Plasmid (h): sc-37437-SH, hamartin shRNA Plasmid (m): sc-37438-SH, hamartin shRNA (h) Lentiviral Particles: sc-37437-V and hamartin shRNA (m) Lentiviral Particles: sc-37438-V.

Molecular Weight of hamartin: 130 kDa.

Positive Controls: C2C12 whole cell lysate: sc-364188, RAT2 whole cell lysate: sc-364198 or MDA-MB-468 cell lysate: sc-2282.

Storage

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

Protocols

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Research use

For research use only, not for use in diagnostic procedures.

Data

Hamartin (H-300): sc-13013. Western blot analysis of hamartin expression in C2C12 (A) and RAT2 (B) whole cell lysates.

Select product citations