For Research Use Only

CoraLite® Plus 647-conjugated Phospho-Hamartin/TSC1 (Ser511) Recombinant antibody



Catalog Number: CL647-80340

Basic Information

Catalog Number: GenBank Accession Number:

CL647-80340 GeneID (NCBI): Size:

100ul, Concentration: 1000 ug/ml by 7248

Nanodrop; **UNIPROT ID:** Source: Q92574 Rabbit Full Name:

Isotype: tuberous sclerosis 1 IgG Calculated MW:

> 130 kDa Observed MW: 150 kDa

Purification Method:

Protein A purification

CloneNo.:

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

Applications

Tested Applications:

FC (Intra)

Species Specificity: human, mouse

Background Information

TSC1, also named as Hamartin, is a tumor suppressor gene syndrome whose manifestations can include seizures, mental retardation, autism, and tumors in the brain, retina, kidney, heart, and skin. The tuberous sclerosis 1 $(TSC1)/TSC2\ tumor\ suppressor\ complex\ serves\ as\ a\ repressor\ of\ the\ mTOR\ pathway,\ and\ disruption\ of\ TSC1/TSC2$ $complex \ function \ may \ contribute \ to \ tumorigenesis. \ TSC1 \ is \ phosphorylated \ by \ IKKb \ at \ Ser487 \ and \ Ser511 \ in \ vitro$ and in vivo, and phosphorylation at these sites enhances dissociation of the TSC1/TSC2 complex, which in turn induces mTOR activation. (PMID: 17693255). TSC1 is also threonine-phosphorylated at three sites (Thr417, Ser584, and Thr1047) in a reaction catalyzed by cyclin-dependent kinase 1 (CDK1) (PMID: 14551205).

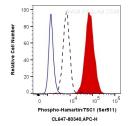
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



1X10^6 HeLa cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug CoraLite® Plus 647 Anti-Human Phospho-Hamartin/TSC1 (Ser511) (CL647-80340, Clone:3N6), or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 50% MeOH.