

For Research Use Only

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



Catalog Number: **CL647-80340**

## Basic Information

<b>Catalog Number:</b> CL647-80340	<b>GenBank Accession Number:</b> NM_000368	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7248	<b>CloneNo.:</b> 3N6
<b>Source:</b> Rabbit	<b>Full Name:</b> tuberous sclerosis 1	<b>Excitation/Emission maxima wavelengths:</b> 650 nm / 665 nm
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 130 kDa	
	<b>Observed MW:</b> 150 kDa	

## 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

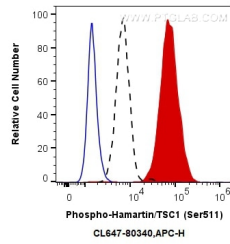
**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



$1 \times 10^6$  HeLa cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.5  $\mu$ g CoraLite® Plus 647 Anti-Human Phospho-Hamartin/TSC1 (Ser511) (CL647-80340, Clone:3N6), or 0.5  $\mu$ g Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 50% MeOH.