For Research Use Only

## Phospho-Hamartin/TSC1 (Ser511) Recombinant antibody



Catalog Number:80340-1-RR

**Basic Information** 

Catalog Number: 80340-1-RR

Size: 500 μg/ml Source: Rabbit

Full Name: Isotype: tuberous sclerosis 1 Calculated MW:

> 130 kDa Observed MW: 150 kDa

NM 000368

**UNIPROT ID:** 

Q92574

GeneID (NCBI):

GenBank Accession Number:

**Purification Method:** Protein A purification

CloneNo.: 3N6

Recommended Dilutions: WB 1:5000-1:50000

**Applications** 

**Tested Applications:** FC, WB, ELISA Species Specificity: Human, mouse

**Positive Controls:** 

WB: NIH/3T3 cells, HeLa cells, Calyculin A treated HeLa cells, Calyculin A treated HEK-293 cells,

Calyculin A treated NIH/3T3 cells

## **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  $complex \ function \ may \ contribute \ to \ tumorigenesis. \ TSC1 \ is \ phosphory lated \ by \ IKKb \ at \ Ser 487 \ and \ Ser 511 \ in \ vitro$ 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:

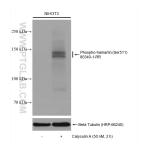
Store at -20°C. Stable for one year after shipment.

Storage Buffer

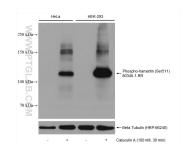
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

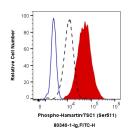
## **Selected Validation Data**



Non-treated and Calyculin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 80340-1-RR (Phospho-Hamartin/TSC1 (Ser511) Antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Non-treated and Calyculin A treated HeLa and HEK-293 cells were subjected to SDS PAGE followed by western blot with 80340-1-RR (Phospho-Hamartin/TSC1 (Ser511) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



1X10^6 Hela cells untreated (dashed lines) and Calyculin A treated (red) were intracellularly stained with 0.5 ug Anti-Human Phospho-Hamartin/TSC1 (Ser511) (80340-1-RR, Clone:3N6) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000, or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 50% MeOH.