For Research Use Only

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



Catalog Number:80340-1-RR

**Basic Information** 

Catalog Number: GenBank Accession Number:

100ul , Concentration: 500 µg/ml by 7248

Source: tuberous sclerosis 1
Rabbit Calculated MW:
Isotype: 130 kDa
IgG Observed MW:

150 kDa

**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,

**Purification Method:** 

CloneNo.:

3N6

Protein A purification

Recommended Dilutions:

WB 1:5000-1:50000

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 phosphorylated by IKKb at Ser487 and Ser511 in viror 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.

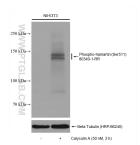
Storage Buffer:

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

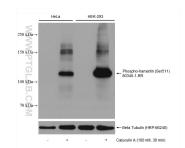
Aliquoting is unnecessary for -20°C storage

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

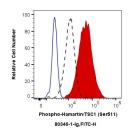
## **Selected Validation Data**



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.