For Research Use Only

## Phospho-Hamartin/TSC1 (Ser511) Recombinant antibody, PBS Only



Catalog Number:80340-1-PBS

**Basic Information** 

Catalog Number:

80340-1-PBS

Size: 1 mg/ml Source:

Rabbit Isotype: GenBank Accession Number:

NM\_000368 GeneID (NCBI):

**UNIPROT ID:** 

Q92574 Full Name:

tuberous sclerosis 1

Calculated MW: 130 kDa Observed MW: 150 kDa

**Purification Method:** 

Protein A purification CloneNo.:

3N6

**Applications** 

**Tested Applications:** WB, Indirect ELISA Species Specificity:

Human, mouse

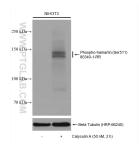
## **Background Information**

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).

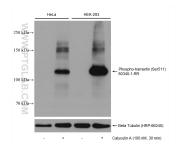
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

## **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. This data was developed using the same antibody clone with 80340-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 80340-1-PBS in a different storage buffer formulation.