

## **Tuberin (phospho Tyr1571) Polyclonal Antibody**

Catalog No: YP1116

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Tuberin

Fields: >>Phospholipase D signaling pathway;>>p53 signaling pathway;>>Autophagy -

animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK

signaling pathway;>>Longevity regulating pathway;>>Cellular

senescence;>>Thermogenesis;>>Insulin signaling pathway;>>Thyroid hormone signaling pathway;>>Human cytomegalovirus infection;>>Human papillomavirus infection;>>Herpes simplex virus 1 infection;>>Choline metabolism in cancer

Gene Name: TSC2

Protein Name: Tuberin

**Human Gene Id:** 7249

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Rat Gene Id: 24855

Rat Swiss Prot No: P49816

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

TSC2 around the phosphorylation site of Tyr1571. AA range:1537-1586

**Specificity:** Phospho-Tuberin (Y1571) Polyclonal Antibody detects endogenous levels of

Tuberin protein only when phosphorylated at Y1571.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source :** Polyclonal, Rabbit, lgG

P49815

Q61037

1/3



**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 170kD

Cell Pathway: Insulin Receptor; mTOR; B Cell Receptor; Akt\_PKB; AMPK

**Background:** Mutations in this gene lead to tuberous sclerosis complex. Its gene product is

believed to be a tumor suppressor and is able to stimulate specific GTPases. The protein associates with hamartin in a cytosolic complex, possibly acting as a chaperone for hamartin. Alternative splicing results in multiple transcript variants

encoding different isoforms. [provided by RefSeq, Jul 2008],

**Function:** alternative products:Additional isoforms seem to exist. Experimental

confirmation may be lacking for some isoforms, disease: Defects in TSC2 are a cause of lymphangioleiomyomatosis (LAM) [MIM:606690]. LAM is a progressive and often fatal lung disease characterized by a diffuse proliferation of abnormal smooth muscle cells in the lungs. It affects almost exclusively young women and can occur as an isolated disorder or in association with tuberous sclerosis

complex., disease: Defects in TSC2 are the cause of tuberous sclerosis complex (TSC) [MIM:191100]. The molecular basis of TSC is a functional impairment of the tuberin-hamartin complex. TSC is an autosomal dominant multi-system disorder that affects especially the brain, kidneys, heart, and skin. TSC is characterized by hamartomas (benign overgrowths predominantly of a cell or

tissue type that occurs normally in the organ) and hamartias (de

Subcellular Location:

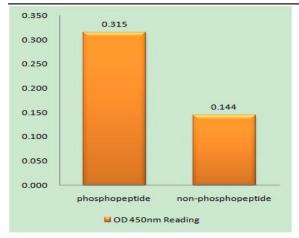
Cytoplasm. Membrane; Peripheral membrane protein. At steady state found in

association with membranes.

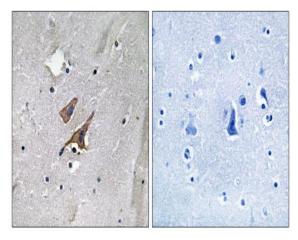
**Expression:** Liver, brain, heart, lymphocytes, fibroblasts, biliary epithelium, pancreas,

skeletal muscle, kidney, lung and placenta.

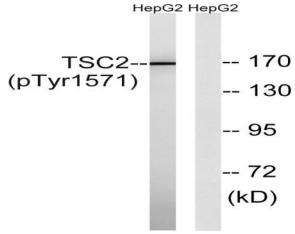
## **Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using TSC2 (Phospho-Tyr1571) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using TSC2 (Phospho-Tyr1571) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of TSC2 (Phospho-Tyr1571) Antibody. The lane on the right is blocked with the TSC2 (Phospho-Tyr1571) peptide.