

## Tuberin Polyclonal Antibody

<b>Catalog No :</b>	YT4774
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Tuberin
<b>Fields :</b>	>>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
<b>Gene Name :</b>	TSC2
<b>Protein Name :</b>	Tuberin
<b>Human Gene Id :</b>	7249
<b>Human Swiss Prot No :</b>	P49815
<b>Mouse Swiss Prot No :</b>	Q61037
<b>Rat Gene Id :</b>	24855
<b>Rat Swiss Prot No :</b>	P49816
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Tuberin/TSC2. AA range:905-954
<b>Specificity :</b>	Tuberin Polyclonal Antibody detects endogenous levels of Tuberin protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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

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**Observed Band :** 200kD

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**Cell Pathway :** Insulin Receptor; mTOR; B Cell Receptor; PI3K/Akt; AMPK

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**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],

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**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

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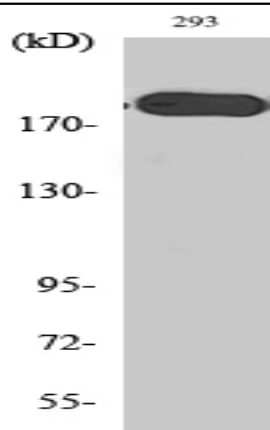
**Subcellular Location :** Cytoplasm. Membrane; Peripheral membrane protein. At steady state found in association with membranes.

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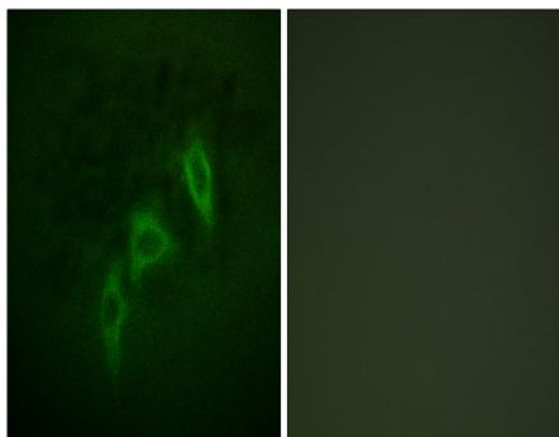
**Expression :** Liver, brain, heart, lymphocytes, fibroblasts, biliary epithelium, pancreas, skeletal muscle, kidney, lung and placenta.

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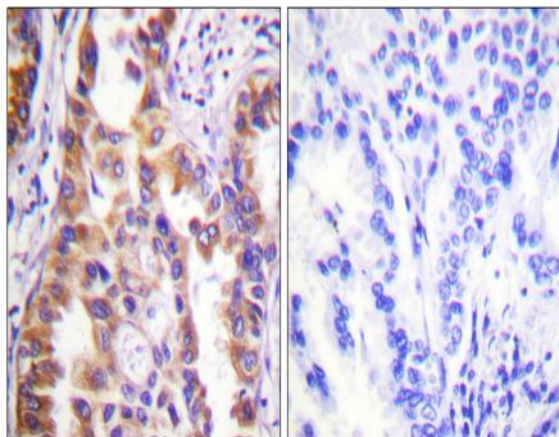
## Products Images



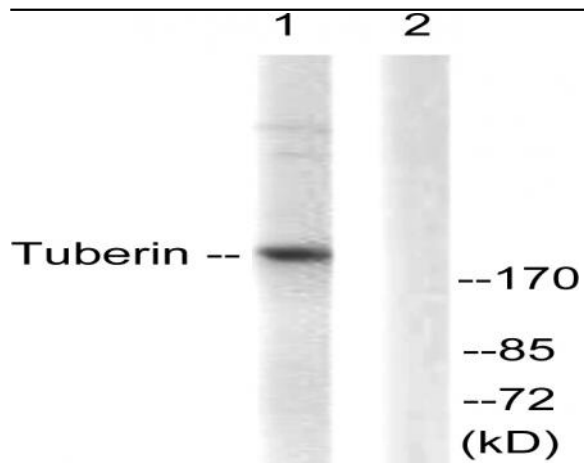
Western Blot analysis of various cells using Tuberin Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of HepG2 cells, using Tuberin/TSC2 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using Tuberin/TSC2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with Anisomycin 25ug/ml 30', using Tuberin/TSC2 Antibody. The lane on the right is blocked with the synthesized peptide.