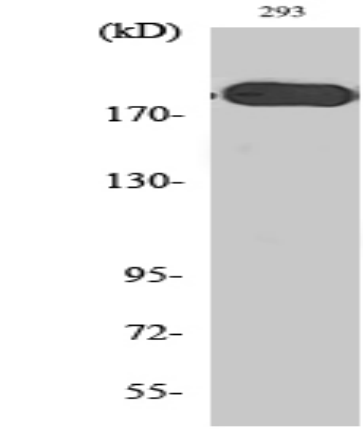
Best Tools for immunology Research

Tuberin Polyclonal Antibody

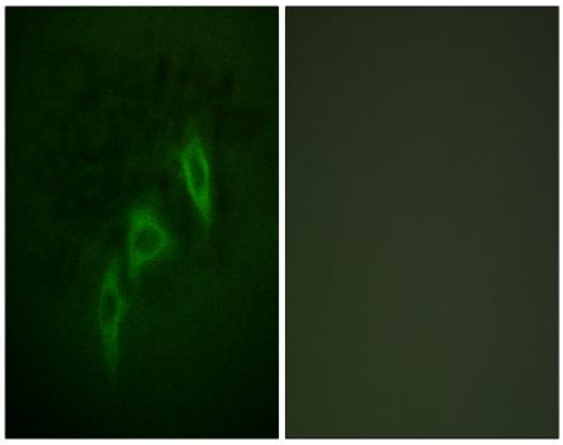
Catalog No :	YT4774
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Tuberin
Fields :	>>Phospholipase D signaling pathway;>>p53 signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Cellular 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 :	P49815
Mouse Swiss Prot No :	Q61037
Rat Gene Id :	24855
Rat Swiss Prot No :	P49816
Immunogen :	The antiserum was produced against synthesized peptide derived from human Tuberin/TSC2. AA range:905-954
Specificity :	Tuberin Polyclonal Antibody detects endogenous levels of Tuberin protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	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.
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 :	200kD
Cell Pathway :	Insulin Receptor; mTOR; B Cell Receptor; PI3K/Akt; 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.

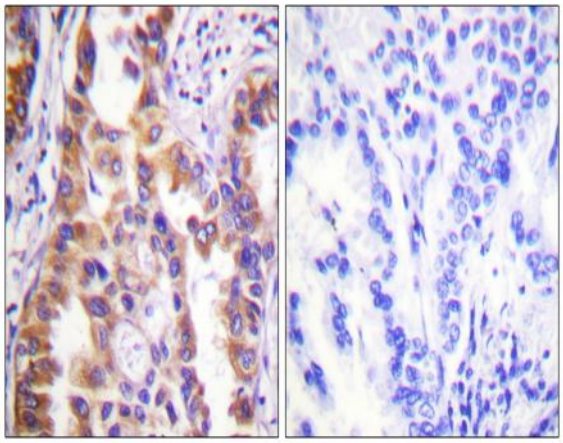
Products Images



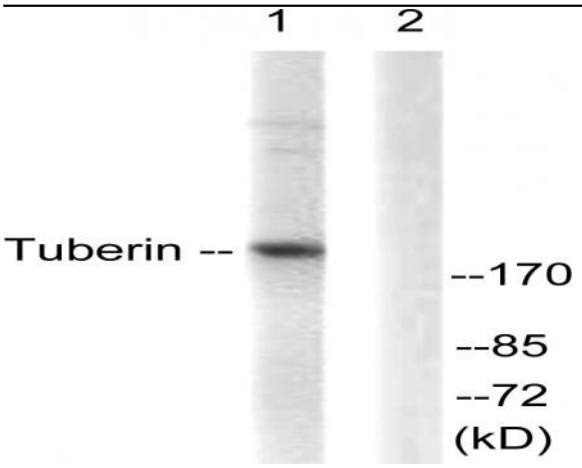
Western Blot analysis of various cells using Tuberin Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



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.