

For Research Use Only

Hamartin/TSC1 Polyclonal antibody

Catalog Number: 29906-1-AP

4 Publications



Basic Information

Catalog Number: 29906-1-AP	GenBank Accession Number: NM_000368	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 600 ug/ml by Nanodrop;	GeneID (NCBI): 7248	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:250-1:1000 IF/ICC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q92574	
Isotype: IgG	Full Name: tuberous sclerosis 1	
Immunogen Catalog Number: AG31621	Calculated MW: 130KD	
	Observed MW: 140-145 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls: WB : HeLa cells, mouse kidney tissue, MCF-7 cells IHC : mouse kidney tissue, mouse skeletal muscle tissue IF/ICC : hTERT-RPE1 cells,
Cited Applications: WB, IHC, IF, IP	
Species Specificity: human, mouse	
Cited Species: human, mouse	
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

TSC1, also named as hamartin, interacts with TSC2 to form a protein complex that inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling (PubMed: 12271141, PubMed: 28215400). It can recruit TSC2 to HSP90AA1 and stabilizes TSC2 by preventing the interaction between TSC2 and ubiquitin ligase HERC1 (PubMed: 16464865, PubMed: 29127155). The loss of TSC1/TSC2 in mouse neurons resulted in a block in oligodendrocyte hypomyelination in vivo (PubMed: 28183733).

Notable Publications

Author	Pubmed ID	Journal	Application
Mengmeng Zhang	39033992	Cell Signal	WB
Xinlin Liu	38890443	Br J Cancer	WB,IP,IHC,IF
Liyang Shan	39552785	Genes Dis	IHC

Storage

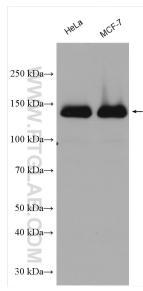
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

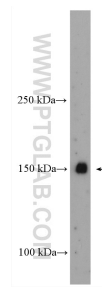
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

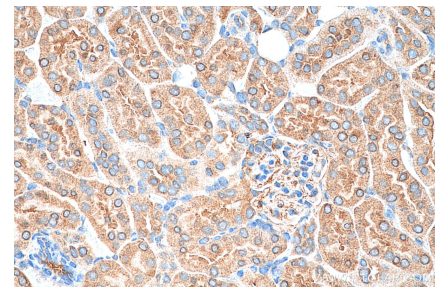
Selected Validation Data



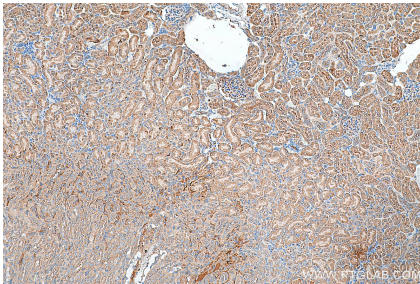
Various lysates were subjected to SDS PAGE followed by western blot with 29906-1-AP (TSC1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



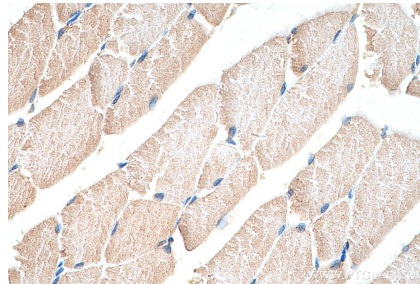
mouse kidney tissue were subjected to SDS PAGE followed by western blot with 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



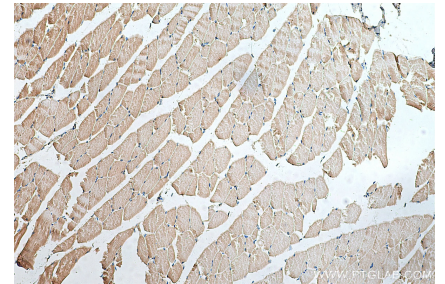
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



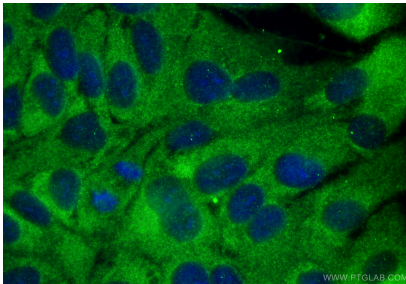
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed hTERT-RPE1 cells using Hamartin/TSC1 antibody (29906-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).