

For Research Use Only

Hamartin/TSC1 Polyclonal antibody

Catalog Number: 29906-1-AP

1 Publications



Basic Information

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

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls: WB : HeLa cells, mouse kidney tissue, MCF-7 cells
Cited Applications: WB	IHC : mouse kidney tissue, mouse skeletal muscle tissue
Species Specificity: Human, mouse	
Cited Species: human	

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
Chaojun Yan	37589705	Elife	WB

Storage

Storage:
Store at -20°C.
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

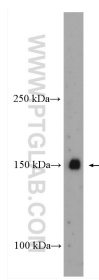
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

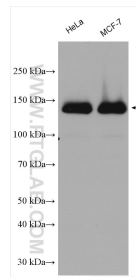
E: proteintech@ptglab.com
W: ptglab.com

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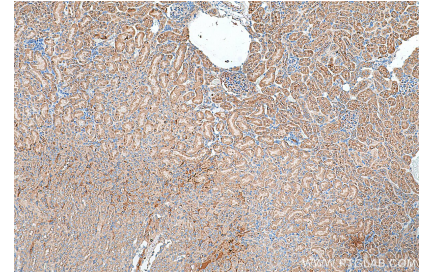
Selected Validation Data



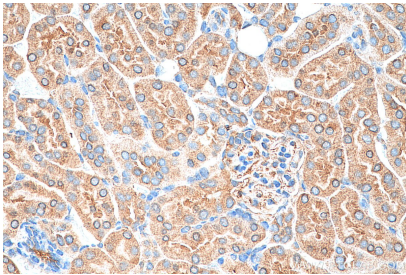
mouse kidney tissue were subjected to SDS PAGE followed by western blot with 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



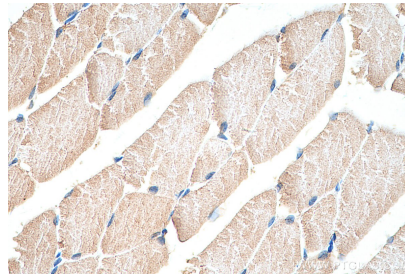
Various lysates were subjected to SDS PAGE followed by western blot with 29906-1-AP (TSC1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



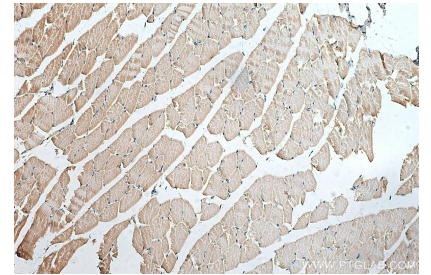
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse 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 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).