

## Hamartin/TSC1 Polyclonal antibody

Catalog Number: 29906-1-AP

4 Publications

## Basic Information

## Catalog Number:

29906-1-AP

## Concentration:

600 ug/ml

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG31621

## GenBank Accession Number:

NM\_000368

## GeneID (NCBI):

7248

## UNIPROT ID:

Q92574

## Full Name:

tuberous sclerosis 1

## Calculated MW:

130KD

## Observed MW:

140-145 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:250-1:1000

IF/ICC 1:50-1:500

## Applications

## Tested Applications:

WB, IHC, IF/ICC, ELISA

## 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**

## Positive Controls:

WB : HeLa cells, mouse kidney tissue, MCF-7 cells

IHC : mouse kidney tissue, mouse skeletal muscle tissue

IF/ICC : hTERT-RPE1 cells,

## 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

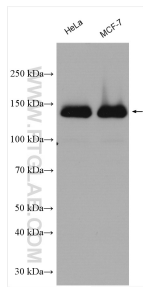
For technical support and original validation data for this product please contact:

T: 4006900926

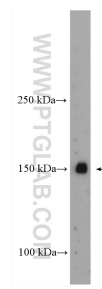
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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

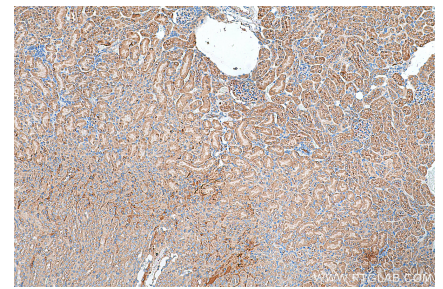
## Selected Validation Data



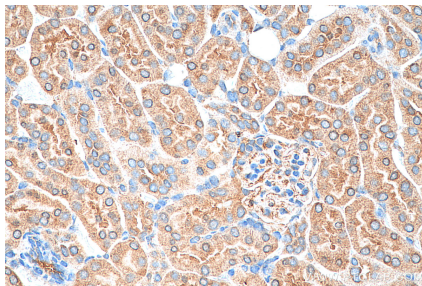
Various lysates were subjected to SDS PAGE followed by western blot with 29906-1-AP (TSC1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



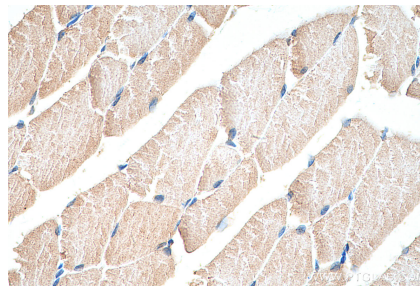
mouse kidney tissue were subjected to SDS PAGE followed by western blot with 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



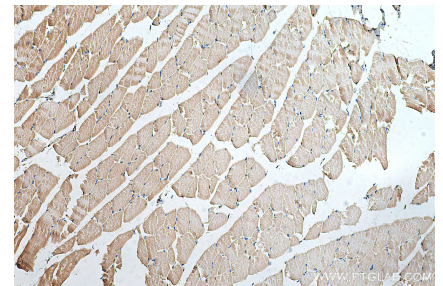
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



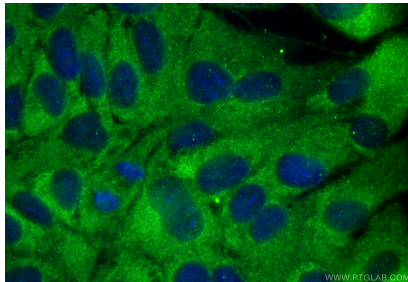
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 29906-1-AP (Hamartin/TSC1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).