

For Research Use Only

# Hamartin Polyclonal ANTIBODY



Catalog Number: 20988-1-AP

Featured Product

6 Publications

## Basic Information

**Catalog Number:**

20988-1-AP

**Size:**

150UL, Concentration: 400 µg/ml by Bradford method using BSA as the standard;

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

NM\_000368

**GeneID (NCBI):**

7248

**Full Name:**

tuberous sclerosis 1

**Calculated MW:**

130 kDa

**Observed MW:**

70 kDa, 130-140 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IP 0.5-4.0 µg for IP and 1:500-1:2000 for WB

IHC 1:20-1:200

IF 1:10-1:100

## Applications

**Tested Applications:**

IF, IHC, IP, WB, ELISA

**Cited Applications:**

WB

**Species Specificity:**

human, mouse, rat

**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,

IP : HeLa cells,

IHC : human kidney tissue, human skeletal muscle tissue

IF : HeLa cells,

## Background Information

TSC1, also named as KIAA0243 and TSC, is implicated as a tumor suppressor. It is involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling. In complex with TSC2, TSC1 inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling. It seems not to be required for TSC2 GAP activity towards RHEB. It is involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling. Defects in TSC1 are the cause of tuberous sclerosis complex (TSC). Defects in TSC1 may be a cause of focal cortical dysplasia of Taylor balloon cell type (FCDBC). The antibody is specific to TSC1. This antibody can recognize two isoforms: 70 kDa (667aa) and 130 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jiexuan Wang	32585629	Mol Ther Nucleic Acids	WB
Jiqian Zhang	32308756	Theranostics	WB
Seung Ho Shin	32789167	Sci Adv	WB

## 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

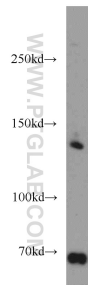
For technical support and original validation data for this product please contact:

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

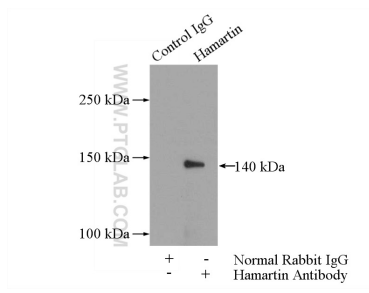
E: proteintech@ptglab.com  
W: ptglab.com

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

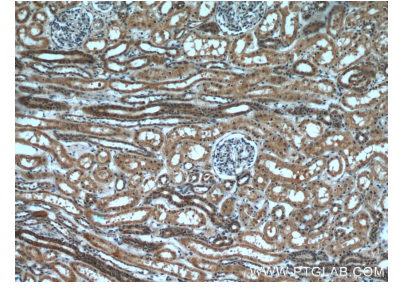
## Selected Validation Data



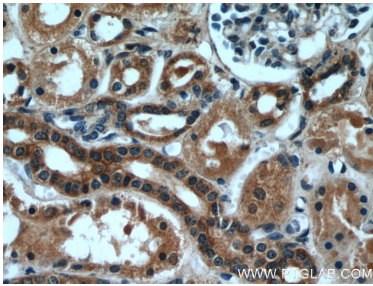
HeLa cells were subjected to SDS PAGE followed by western blot with 20988-1-AP (hamartin antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



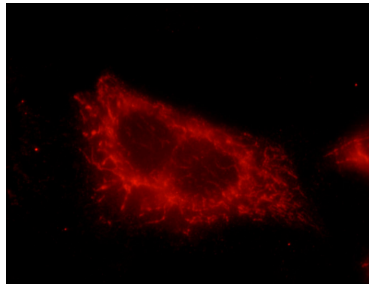
IP Result of anti-hamartin (IP:20988-1-AP, 4ug; Detection:20988-1-AP 1:1000) with HeLa cells lysate 2000ug.



Immunohistochemical analysis of paraffin-embedded human kidney using 20988-1-AP (hamartin antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human kidney using 20988-1-AP (hamartin antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of HeLa cells using 20988-1-AP (hamartin antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.