

Anti-Hamartin Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

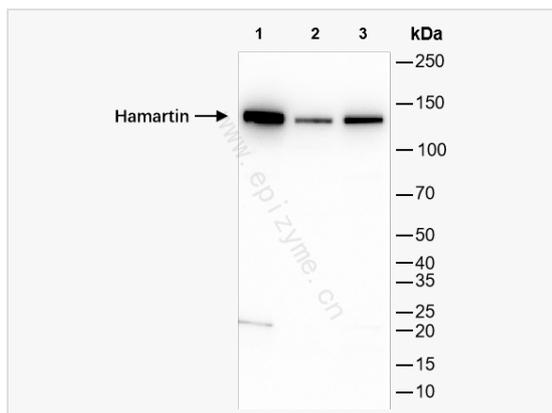
Catalog # R014011

Product Information

Application	ELISA, IHC-P/IF (Tissue-P), IF (Cell)/ICC, WB
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	67K16J83
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Hamartin
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Hamartin Rabbit mAb [67K16J83] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	Hamartin, kiaa0243, LAM, TSC, Tsc1, Tsc1 gene, TSC1_HUMAN, Tuberous sclerosis 1, Tuberous sclerosis 1 protein, tumor suppressor.
Calculated MW	Calculated MW: 130 kDa; Observed MW: 150 kDa
Uniprot ID	Q92574
Gene ID	7248
Background	In complex with TSC2, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling. Seems not to be required for TSC2 GAP activity towards RHEB. Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling.
Cellular Location	Cytoplasm. Membrane. At steady state found in association with membranes.
Tissue Location	Highly expressed in skeletal muscle, followed by heart, brain, placenta, pancreas, lung, liver and kidney. Also expressed in embryonic kidney cells.



Western Blot - Anti-Hamartin Rabbit mAb [67K16J83]

All lanes: R014011 at 1:2,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

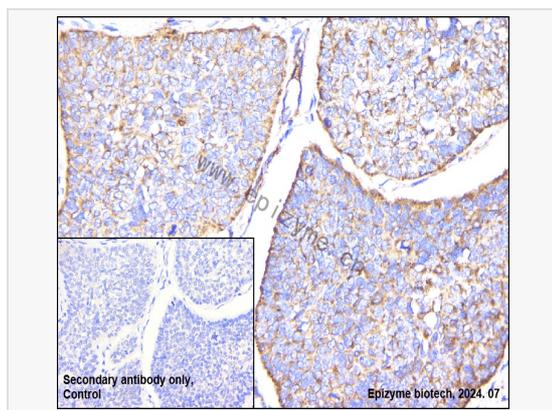
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 130 kDa

Observed band size: 150 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-Hamartin Rabbit mAb [67K16J83]

Sample: Paraformaldehyde-fixed, paraffin embedded human lung cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R014011 at 1:200 dilution

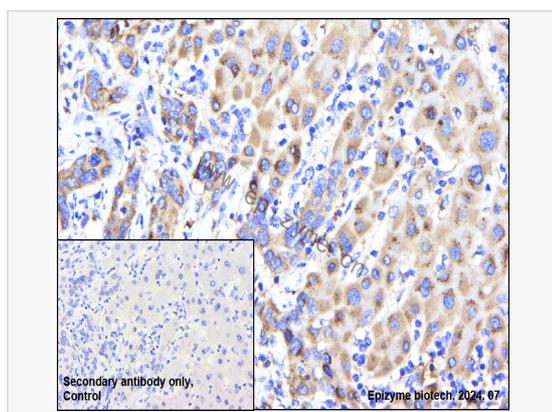
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Hamartin Rabbit mAb [67K16J83]

Sample: Paraformaldehyde-fixed, paraffin embedded human hepatoma cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R014011 at 1:200 dilution

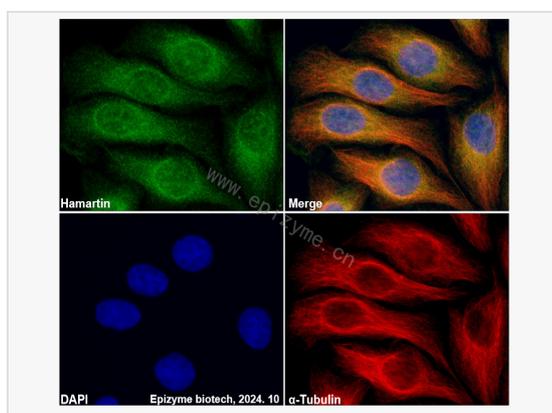
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-Hamartin Rabbit mAb [67K16J83]

Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R014011 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and

Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).