

Rabbit anti-Human Hamartin/TSC1 Polyclonal Antibody | anti-TSC1 antibody

Anti-Hamartin/TSC1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19734	Rabbit	Human	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

Hamartin/TSC1; Polyclonal Antibody; Anti-Hamartin/TSC1 Antibody Picoband; ETS variant 6; Transcription factor ETV6; ETS translocation variant 6; ETS-related protein Tel1; Tel; ETV6; TEL; TEL1; anti-TSC1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Ubiquitous.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-TSC1 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB: 0.25-0.5ug/ml, Human IHC(Paraffin-embedded Section): 2-5ug/ml, Human ICC/IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10 ⁶ cells, Human ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived human Hamartin/TSC1 recombinant protein (Position: M1-H618).
Subcellular Localization	Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Transcriptional repressor; binds to the DNA sequence 5'- CCGGAAGT-3'. Plays a role in hematopoiesis and malignant transformation.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM (Flow Cytometry)

Figure 8. Flow Cytometry analysis of THP-1 cells using anti-Hamartin/TSC1 antibody (AAA19734). Overlay histogram showing THP-1 cells stained with AAA19734 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Hamartin/TSC1 Antibody (AAA19734, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF (Immunofluorescence)

Figure 7. IF analysis of Hamartin/TSC1 using anti-Hamartin/TSC1 antibody (AAA19734). Hamartin/TSC1 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hamartin/TSC1 Antibody (AAA19734) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hamartin/TSC1 Antibody (AAA19734) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hamartin/TSC1 Antibody (AAA19734) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hamartin/TSC1 Antibody (AAA19734) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hamartin/TSC1 Antibody (AAA19734) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Hamartin/TSC1 antigen affinity purified polyclonal antibody (#AAA19734) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Hamartin/TSC1 at approximately 160 kDa. The expected band size for Hamartin/TSC1 is at 130 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-TSC1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-TSC1 antibody	Primary Antibodies; Cancer Susceptibility; Domain Families; Epigenetics and Nuclear Signaling; Proto-Oncogenes; Transcription; Transcription Factors
References	1. Benvenuto, G., Li, S., Brown, S. J., Braverman, R., Vass, W. C., Cheadle, J. P., Halley, D. J. J., Sampson, J. R., Wienecke, R., DeClue, J. E. The tuberous sclerosis-1 (TSC1) gene product hamartin suppresses cell growth and augments the expression of the TSC2 product tuberin by inhibiting its ubiquitination. Oncogene 19: 6306-6316, 2000.2. Choi, Y.-J., Di Nardo, A., Kramvis, I., Meikle, L., Kwiatkowski, D. J., Sahin, M., He, X. Tuberous sclerosis complex proteins control axon formation. Genes Dev. 22: 2485-2495, 2008. 3. Tapon, N., Ito, N., Dickson, B. J., Treisman, J. E., Hariharan, I. K. The Drosophila tuberous sclerosis complex gene homologs restrict cell growth and cell proliferation. Cell 105: 345-355, 2001.

NCBI AND UNIPROT INFORMATION

NCBI GI #	9297077
NCBI GeneID	7248
UniProt Accession #	Q92574; Q5VVN5; B7Z897

Molecular Weight	1164
NCBI Official Full Name	Hamartin
NCBI Official Synonym Full Names	tuberous sclerosis 1
NCBI Official Symbol	TSC1
NCBI Official Synonym Symbols	LAM; TSC
NCBI Protein Information	hamartin; tumor suppressor; tuberous sclerosis 1 protein
UniProt Protein Name	Hamartin
UniProt Gene Name	TSC1
UniProt Synonym Gene Names	KIAA0243; TSC
UniProt Entry Name	TSC1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/hamartin-tsc1-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19734>