TSC1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	TSC1, Polyclonal Antibody
Full Product Name	TSC1 Antibody, FITC conjugated
Product Gene Name	anti-TSC1 antibody
Product Synonym Names	Hamartin; Tuberous sclerosis 1 protein; TSC1; KIAA0243; TSC
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid
Purity/Purification	>95%, Protein G purified
Preparation and Storage	Shipped at 4 degree C. Upon delivery aliquot and store at -20 degree C or -80 degree C. Avoid repeated freeze.
Matching Pairs	Unconjugated Antibody: TSC1 (MBS7050923) FITC Conjugated Antibody: TSC1 (MBS7050925)
Molecular Weight	124,015 Da
OMIM	AF013168 mRNA
3D Structure	ModBase 3D Structure for Q92574
Immunogen	Recombinant human Hamartin protein (101-344AA)
Preservative	0.03% Proclin 300
Constituents	50% Glycerol, 0.01M PBS, PH 7.4
Conjugation	FITC
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-12080 / sc-12082 / sc-12079 / sc-13013
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-TSC1 antibody	ELISA (EIA)
Related Product Information for anti-TSC1 antibody	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.
Other Notes	Small volumes of anti-TSC1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for TSC1 purchase	MBS7050925 is an antibody targeting TSC1. Also known as TSC1 Antibody, FITC conjugated. Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for TSC1. It may not necessarily be applicable to this product.

NCBI GI #	4507693
NCBI GeneID	7248
NCBI Accession #	NP_000359.1
UniProt Primary Accession #	Q92574
UniProt Secondary Accession #	Q5VVN5; B7Z897
UniProt Related Accession #	Q92574
GenBank Nucleotide #	NM_000368.4
NCBI Official Full Name	hamartin isoform 1
NCBI Official Synonym Full Names	tuberous sclerosis 1
NCBI Official Symbol	TSC1
NCBI Official Synonym Symbols	LAM; TSC
UniProt Protein Name	Hamartin
UniProt Synonym Protein Names	Tuberous sclerosis 1 protein
Protein Family	Hamartin
UniProt Gene Name	TSC1
UniProt Synonym Gene Names	KIAA0243; TSC
UniProt Entry Name	TSC1_HUMAN
NCBI Protein Information	hamartin
NCBI Summary for TSC1	This gene encodes a growth inhibitory protein thought to play a role in the stabilization of tuberin. Mutations in this gene have been associated with tuberous sclerosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2009]
UniProt Comments for TSC1	TSC1: tuberous sclerosis protein 1 (TSC1). May have tumor suppressor activity. Together with tuberin (TSC2), inhibits mammalian target of rapamycin (mTOR)-mediated signaling to eukaryotic initiation factor 4E-binding protein 1 (4E-BP1) and ribosomal protein S6 kinase. Regulated by the phosphatidylinositol 3-kinase/Akt pathway and phosphorylation of tuberin. Phosphorylated by cyclin-dependent kinase 1/cyclin B during the cell cycle. Protein type: Motility/polarity/chemotaxis; Tumor suppressor Chromosomal Location of Human Ortholog: 9q34 Cellular Component: actin filament; cell cortex; cytoplasm; cytosol; lamellipodium; membrane; nucleus; perinuclear region of cytoplasm; plasma membrane; protein complex; TSC1-TSC2 complex Molecular Function: chaperone binding; GTPase regulator activity; protein binding; protein N-terminus binding Biological Process: adult locomotory behavior; cell cycle arrest; cell-matrix adhesion; negative regulation of cell proliferation; negative regulation of insulin receptor signaling pathway; negative regulation of macroautophagy; negative regulation of TOR signaling pathway; negative regulation of translation; positive regulation of focal adhesion formation; protein stabilization; regulation of cell cycle; regulation of cell-matrix adhesion; regulation of phosphoprotein phosphatase activity; regulation of stress fiber formation; regulation of translation; response to insulin stimulus; rRNA export from nucleus Disease: Focal Cortical Dysplasia Of Taylor; Lymphangioleiomyomatosis; Tuberous Sclerosis 1
Research Articles on TSC1	**1.** Gene expression level of TSC1 is significantly higher in AD patients when compared to normal controls.

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