

Rabbit anti-Mouse, Rat TSC1 Polyclonal Antibody | anti-TSC1 antibody

RABBIT ANTI TSC1

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA49908	Rabbit	Mouse, Rat	Western Blot, Immunohistochemistry, Immunohistochemistry

PRODUCT SYNONYMS

TSC1; Polyclonal Antibody; RABBIT ANTI TSC1; anti-TSC1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	This item recognises an epitope within the internal region of the 130kDa tumour suppressor protein, Tumour sclerosis complex 1 (TSC1). Mutation within the TSC1 gene is responsible for Tuberous sclerosis (TSC), an autosomal dominant genetic disorder associated with the development of benign tumors (hamartomas), a condition also induced by mutation of the Tumour sclerosis complex 2 (TSC2) gene. Many proteins have been shown to play a role in the regulation of the serine/threonine kinase known as target of rapamycin (TOR), a central component in a complex signaling pathway which controls cell proliferation and cell cycle progression. Negative regulation of TOR activity occurs following the over-expression of the TSC1 and TSC2 gene products, hamartin and tuberlin. These act by suppressing the phosphorylation of eukaryotic translation initiation factor 4E binding protein 1 (4EBP1) and ribosomal protein S6 kinase (S6K), downstream targets of TOR involved in mRNA translation. Furthermore the TOR activator protein Rheb has been identified as a target of TSC1-TSC2 complexes. This item has been reported as suitable for use in IHC on mouse EL4 cell cytopins at 2ug/ml.
Form/Format	Purified Purified IgG - liquid
Concentration	IgG concentration 1.0mg/ml (varies by lot)
Sequence Length	1,113
Applicable Applications for anti-TSC1 antibody	WB (Western Blot), IHC (Immunohistochemistry), IHC (Immunohistochemistry)
Perservative Stabilisers	0.02% Sodium Azide
Immunogen	A 15 amino acid peptide located near the centre of human TSC1. Buffer Solution
Antiserum Preparation	Antisera to human TSC1 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.
Target Species	Human
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf Life: 18 months from date of despatch.

IMAGES



Application Data
Immunocytochemical staining of EL4 cells with Rabbit anti Human TSC1 (AAA49908)



Application Data
Western blot analysis of whole cell lysate from EL4 mouse lymphoblast cells probed with Rabbit anti Human TSC1 (AAA49908) in the absence (A) or presence (B) of blocking peptide

ADDITIONAL INFORMATION

Related Product Information for anti-TSC1 antibody	MBS221310 recognises an epitope within the internal region of the 130kDa tumour suppressor protein, Tumour sclerosis complex 1 (TSC1). Mutation within the TSC1 gene is responsible for Tuberous sclerosis (TSC), an autosomal dominant genetic disorder associated with the development of benign tumors (hamartomas), a condition also induced by mutation of the Tumour sclerosis complex 2 (TSC2) gene. Many proteins have been shown to play a role in the regulation of the serine/threonine kinase known as target of rapamycin (TOR), a central component in a complex signaling pathway which controls cell proliferation and cell cycle progression. Negative regulation of TOR activity occurs following the over-expression of the TSC1 and TSC2 gene products, hamartin and tuberlin. These act by suppressing the phosphorylation of eukaryotic translation initiation factor 4E binding protein 1 (4EBP1) and ribosomal protein S6 kinase (S6K), downstream targets of TOR involved in mRNA translation. Furthermore the TOR activator protein Rheb has been identified as a target of TSC1-TSC2 complexes. MBS221310 has been reported as suitable for use in IHC on mouse EL4 cell cytopins at 2ug/ml.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4507693
NCBI GeneID	7248
NCBI Accession #	NP_000359.1
NCBI GenBank Nucleotide #	NM_000368.4
UniProt Accession #	Q92574; Q5VVN5; B7Z897
Molecular Weight	124,015 Da
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
NCBI Protein Information	hamartin; tuberous sclerosis 1 protein; tumor suppressor
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.