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Datasheet for 600-401-FQ8

TSC1 Antibody

Overview

Description:	Anti-TSC1 (RABBIT) Antibody - 600-401-FQ8
Item No.:	600-401-FQ8
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Tuberous sclerosis complex (TSC) is an autosomal dominant tumor syndrome caused by mutations in either of the TSC1 or TSC2 tumor suppressor genes. The products of these genes form a protein complex that indirectly decreases the signaling of the mammalian Target of Rapamycin (TOR), an evolutionarily conserved serine/threonine kinase that regulates cell growth and cell cycle through its ability to integrate signals from nutrient levels and growth factors. TOR activity is stimulated by Rheb, a member of the Ras superfamily of G-proteins, when the GTP/GDP ratio bound to Rheb is high. Immunoprecipitated TSC1/TSC2 has been shown to stimulate Rheb GTPase activity in vitro, suggesting that the TSC1/TSC2 decreases the ability of Rheb to stimulate TOR activity. This is supported by experiments showing overexpression of TSC1 and TSC2 results in a significant decrease in the GTP/GDP ratio bound to Rheb and the inhibition of cell growth. A shorter 40 kDa isoform of TSC1 has been shown to exist but its function is unknown.
Synonyms:	TSC1 Antibody, LAM, TSC, KIAA0243, Hamartin, Tuberous sclerosis 1 protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TSC1
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-TSC1 (CT) antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from the C-terminus of human TSC1.
Purity/Specificity:	Anti-TSC1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with TSC1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q92574 • GeneID - 7248 • NCBI - NP_000359.1

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-TSC1 Antibody has been tested for use in ELISA and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 130 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:40,000
WB:	2-4 µg/mL

Formulation

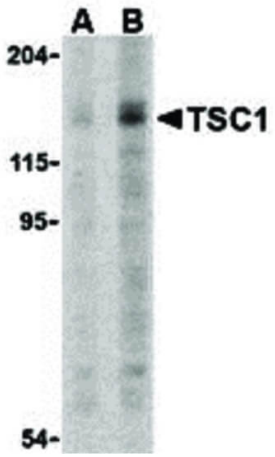
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western Blot of TSC1 antibody in C2C12 cell lysate. Lane A: TSC1 antibody at 2 µg. Lane B: TSC1 antibody at 4 µg. Load: 35 µg per lane. Primary antibody: TSC1 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 50 kDa, 125 kDa for TSC1. Other band(s): TSC1 splice variants and isoforms.

Disclaimer

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