

Datasheet for 600-401-FR0**TSC2 Antibody****Overview**

Description:	Anti-TSC2 (RABBIT) Antibody - 600-401-FR0
Item No.:	600-401-FR0
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 complex decreases the ability of Rheb to stimulate TOR activity. This is supported by experiments showing that overexpression of TSC1 and TSC2 results in a significant decrease in the GTP/GDP ratio bound to Rheb and the inhibition of cell growth. At least three isoforms of TSC2 exist.
Synonyms:	TSC2 Antibody, LAM, TSC4, Tuberin, Tuberous sclerosis 2 protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TSC2
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-TSC2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide from near the C-terminus of human TSC2.
Purity/Specificity:	Anti-TSC2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with TSC2 from other sources has not been determined.
Relevant Links:	• UniProtKB - P49815 • GeneID - 7249 • NCBI - NP_000539.2

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-TSC2 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 201 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:	1:10,000
WB:	1 µg/mL

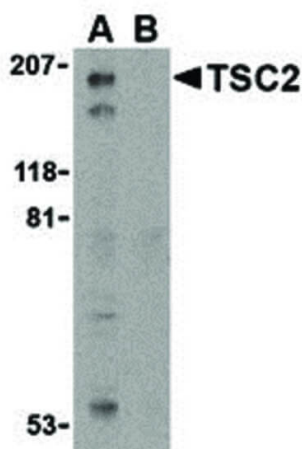
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 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 TSC2 antibody in L1210 cell lysate. Lane A: TSC2 antibody in the absence of blocking peptide. Lane B: TSC2 antibody in the presence of blocking peptide. Load: 35 µg per lane. Primary antibody: TSC2 antibody at 1 µg/mL 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: 96 kDa, 205 kDa for TSC2. Other band(s): TSC2 splice variants and isoforms.

Disclaimer

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