


Product datasheet

Anti-Tuberin (phospho S939) antibody [EP1062Y] ab52962

Recombinant RabMAb

[3 References](#) [3 Images](#)

Overview

Product name	Anti-Tuberin (phospho S939) antibody [EP1062Y]
Description	Rabbit monoclonal [EP1062Y] to Tuberin (phospho S939)
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF, IHC-Fr, IHC-P or IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	3T3 cell lysates (untreated or treated with insulin). WB: SH-SY5Y (Human neuroblastoma epithelial cell) treated with 200nM Okadaic Acid (OA) and 1uM Calyculin A (CA) for 60 min whole cell lysates
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1062Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab52962 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 180 kDa (predicted molecular weight: 201 kDa).

Application notes Is unsuitable for Flow Cyt, ICC/IF, IHC-Fr, IHC-P or IP.

Target

Function In complex with TSC1, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling. Acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of mTORC1. Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling. Stimulates weakly the intrinsic GTPase activity of the Ras-related proteins RAP1A and RAB5 in vitro. Mutations in TSC2 lead to constitutive activation of RAP1A in tumors.

Tissue specificity Liver, brain, heart, lymphocytes, fibroblasts, biliary epithelium, pancreas, skeletal muscle, kidney, lung and placenta.

Involvement in disease Defects in TSC2 are the cause of tuberous sclerosis type 2 (TSC2) [MIM:613254]. TSC2 is an autosomal dominant multi-system disorder that affects especially the brain, kidneys, heart, and skin. It is characterized by hamartomas (benign overgrowths predominantly of a cell or tissue type that occurs normally in the organ) and hamartias (developmental abnormalities of tissue combination). Clinical symptoms can range from benign hypopigmented macules of the skin to profound mental retardation with intractable seizures to premature death from a variety of disease-associated causes.

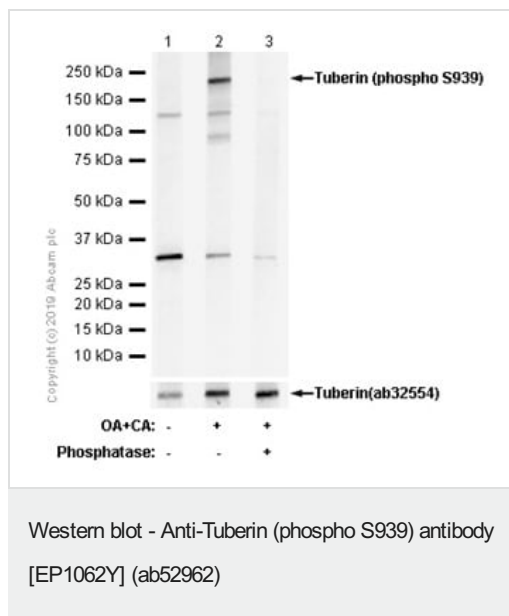
Defects in TSC2 are a cause of lymphangioleiomyomatosis (LAM) [MIM:606690]. LAM is a progressive and often fatal lung disease characterized by a diffuse proliferation of abnormal smooth muscle cells in the lungs. It affects almost exclusively young women and can occur as an isolated disorder or in association with tuberous sclerosis complex.

Sequence similarities Contains 1 Rap-GAP domain.

Post-translational modifications Phosphorylation at Ser-1387, Ser-1418 or Ser-1420 does not affect interaction with TSC1. Phosphorylation at Ser-939 and Thr-1462 by PKB/AKT1 is induced by growth factor stimulation.

Cellular localization Cytoplasm. Membrane. At steady state found in association with membranes.

Images



All lanes : Anti-Tuberin (phospho S939) antibody [EP1062Y] (ab52962) at 1/1000 dilution

Lane 1 : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates

Lane 2 : SH-SY5Y (Human neuroblastoma epithelial cell) treated with 200nM Okadaic Acid (OA) and 1uM Calyculin A (CA) for 60 min whole cell lysates

Lane 3 : SH-SY5Y (Human neuroblastoma epithelial cell) treated with 200nM Okadaic Acid (OA) and 1uM Calyculin A (CA) for 60 min whole cell lysates. Then the membrane was incubated with phosphatase.

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Developed using the ECL technique.

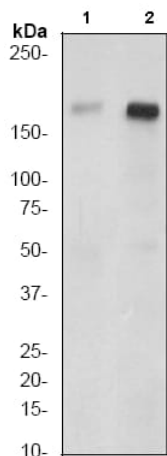
Predicted band size: 201 kDa

Observed band size: 180 kDa

Exposure time: 90 seconds

Blocking/Diluting buffer and concentration: 5% NFDM/TBST.

This image is derived from purified batch.



Western blot - Anti-Tuberin (phospho S939) antibody [EP1062Y] (ab52962)

All lanes : Anti-Tuberin (phospho S939) antibody [EP1062Y] (ab52962) at 1/10000 dilution

Lane 1 : 3T3 cell lysate untreated

Lane 2 : 3T3 cell lysate treated with insulin

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 201 kDa

Observed band size: 180 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Tuberin (phospho S939) antibody [EP1062Y] (ab52962)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors