

Product datasheet

Anti-Tuberin (phospho S939) antibody [EP1062Y] - BSA and Azide free ab247344

Recombinant RabMAb

3 Images

Overview

Product name	Anti-Tuberin (phospho S939) antibody [EP1062Y] - BSA and Azide free
Description	Rabbit monoclonal [EP1062Y] to Tuberin (phospho S939) - BSA and Azide free
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.
General notes	<p>ab247344 is the carrier-free version of ab52962.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <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 +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1062Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab247344 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		Use at an assay dependent concentration. 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.

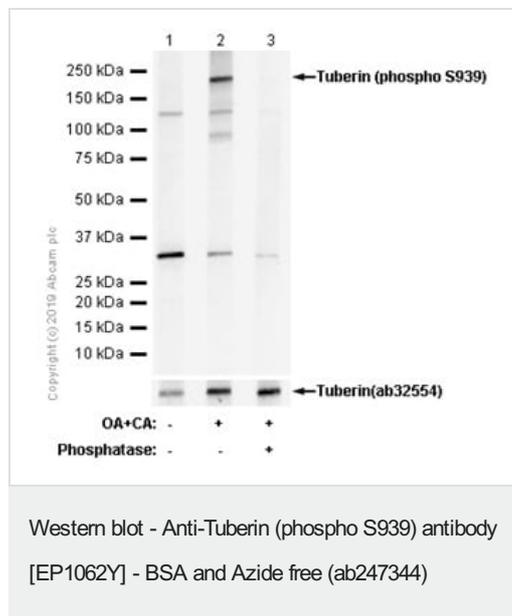
Post-translational modifications

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

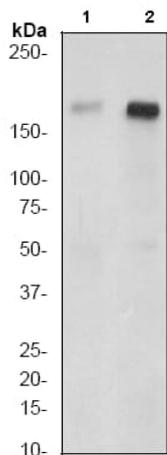
Observed band size: 180 kDa

Exposure time: 90 seconds

This data was developed using [ab52962](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDN/TBST.

This image is derived from purified batch.



Western blot - Anti-Tuberin (phospho S939) antibody [EP1062Y] - BSA and Azide free (ab247344)

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

This data was developed using [ab52962](#), the same antibody clone in a different buffer formulation.

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] - BSA and Azide free (ab247344)

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

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