# abcam

#### Product datasheet

## Anti-Tuberin (phospho T1462) antibody [EPR1060(2)] ab109403



重组 RabMAb

4 图像 1 References

概述

产品名称 Anti-Tuberin (phospho T1462)抗体[EPR1060(2)]

描述 兔单克隆抗体[EPR1060(2)] to Tuberin (phospho T1462)

宿主 Rabbit

经测试应用 适用于: WB, IHC-P

不适用于: Flow Cyt,ICC/IF or IP

种属反应性 与反应: Mouse, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 NIH/3T3 cell lysate, Human liver tissue and HeLa cells.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

纯度 Protein A purified

克隆 单克隆

**克隆编号** EPR1060(2)

**同种型** IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab109403于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000 - 1/10000. Detects a band of approximately 180 kDa (predicted molecular weight: 201 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

应用说明

Is unsuitable for Flow Cyt,ICC/IF or IP.

靶标

功能 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.

组织特异性 Liver, brain, heart, lymphocytes, fibroblasts, biliary epithelium, pancreas, skeletal muscle, kidney,

lung and placenta.

疾病相关 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.

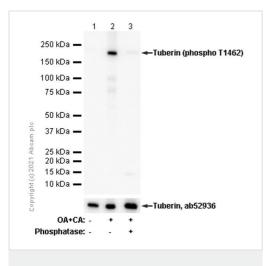
序列相似性 Contains 1 Rap-GAP domain.

翻译后修饰 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.

细胞定位 Cytoplasm. Membrane. At steady state found in association with membranes.

图片



Western blot - Anti-Tuberin (phospho T1462) antibody [EPR1060(2)] (ab109403)

**All lanes :** Anti-Tuberin (phospho T1462) antibody [EPR1060(2)] (ab109403) at 1/10000 dilution

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

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

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

Lysates/proteins at 15 µg per lane.

#### Secondary

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

**Predicted band size:** 201 kDa **Observed band size:** 180 kDa

Exposure time: 20 seconds

Blocking/Diluting buffer and concentration 5% NFDM/TBST

KDa 1 2
250—
150—
100—
75—
50—
37—

Western blot - Anti-Tuberin (phospho T1462) antibody [EPR1060(2)] (ab109403)

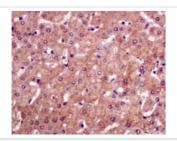
**All lanes :** Anti-Tuberin (phospho T1462) antibody [EPR1060(2)] (ab109403) at 1/1000 dilution

Lane 1: NIH/3T3 cell lysate

Lane 2: NIH/3T3 cell lysate treated with insulin.

Lysates/proteins at 10 µg per lane.

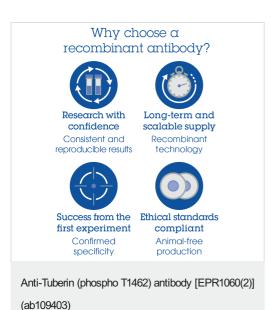
**Predicted band size:** 201 kDa **Observed band size:** 180 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Tuberin (phospho T1462) antibody [EPR1060(2)] (ab109403)

Immunohistochemical analysis of paraffin-embedded Human liver tissue using ab109403 at 1/50

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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