

#### Phospho-mouse TSC2(S1421) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3828a

### **Specification**

# Phospho-mouse TSC2(S1421) Antibody - Product Information

Application DB,E **Primary Accession** Q61037 Other Accession P49816 Reactivity Mouse Predicted Rat Host Rabbit Clonality **Polyclonal** Isotype Rabbit Ig Calculated MW 202071

Phospho-mouse TSC2(S1421) Antibody - Additional Information

#### Other Names

Tuberin, Tuberous sclerosis 2 protein homolog, Tsc2

## **Target/Specificity**

This mouse TSC2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S1421 of mouse TSC2.

### **Dilution**

DB~~1:500

## **Format**

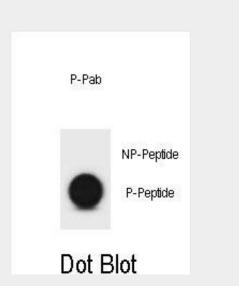
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Phospho-mouse TSC2(S1421) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Dot blot analysis of mouse TSC2 Antibody (Phospho S1421) Phospho-specific Pab (Cat. #AP3828a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

# Phospho-mouse TSC2(S1421) Antibody - Background

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 (By similarity). Specifically stimulates the intrinsic GTPase activity of the Ras-related protein RAP1A and RAB5. Suggesting a possible mechanism for its role in regulating cellular growth (By similarity).



# Phospho-mouse TSC2(S1421) Antibody - Protein Information

#### Name Tsc2

#### **Function**

In complex with TSC1, this tumor suppressor inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling (By similarity). Acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of mTORC1 (By similarity). May also play a role in microtubule-mediated protein transport (PubMed:<a href="http://www.uni prot.org/citations/16707451" target=" blank">16707451</a>). Also stimulates the intrinsic GTPase activity of the Ras-related proteins RAP1A and RAB5 (By similarity).

# **Cellular Location**

Cytoplasm. Membrane; Peripheral membrane protein. Note=At steady state found in association with membranes.

**Tissue Location** Widely expressed.

# Phospho-mouse TSC2(S1421) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture