

**Phospho-mouse TSC1(T310) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3819a**

**Specification**

**Phospho-mouse TSC1(T310) Antibody - Product Information**

|                   |                             |
|-------------------|-----------------------------|
| Application       | DB,E                        |
| Primary Accession | <a href="#">Q9EP53</a>      |
| Other Accession   | <a href="#">NP_075025.2</a> |
| Reactivity        | Mouse                       |
| Host              | Rabbit                      |
| Clonality         | Polyclonal                  |
| Isotype           | Rabbit Ig                   |
| Calculated MW     | 128746                      |

**Phospho-mouse TSC1(T310) Antibody - Additional Information**

**Gene ID** 64930

**Other Names**

Hamartin, Tuberous sclerosis 1 protein homolog, Tsc1, Kiaa0243

**Target/Specificity**

This mouse TSC1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T310 of mouse TSC1.

**Dilution**

DB~~1:500

**Format**

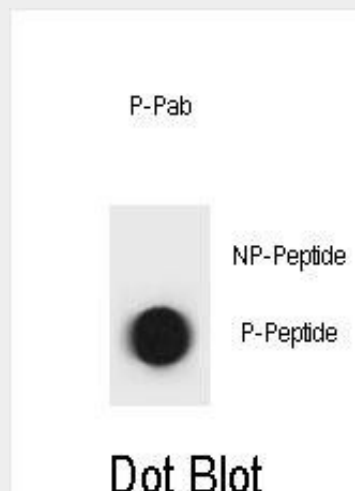
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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 TSC1(T310) Antibody is for research use only and not for use in



Dot blot analysis of mouse TSC1 Antibody (Phospho T310) Phospho-specific Pab (Cat. #AP3819a) 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 TSC1(T310) Antibody - Background**

In complex with TSC2, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling (By similarity). Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling (By similarity).

**Phospho-mouse TSC1(T310) Antibody - References**

Kladney, R.D., et al. Cancer Res. 70(21):8937-8947(2010)  
Sathaliyawala, T., et al. Immunity 33(4):597-606(2010)  
Scott, C.L., et al. Am. J. Physiol. Lung Cell Mol. Physiol. 299 (4), L455-L471 (2010) :

diagnostic or therapeutic procedures.

#### **Phospho-mouse TSC1(T310) Antibody - Protein Information**

**Name** Tsc1

**Synonyms** Kiaa0243

#### **Function**

In complex with TSC2, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling (By similarity). Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling (PubMed:<a href="http://www.uniprot.org/citations/16707451" target="\_blank">16707451</a>). Acts as a co-chaperone for HSP90AA1 facilitating HSP90AA1 chaperoning of protein clients such as kinases, TSC2 and glucocorticoid receptor NR3C1 (PubMed:<a href="http://www.uniprot.org/citations/29127155" target="\_blank">29127155</a>). Increases ATP binding to HSP90AA1 and inhibits HSP90AA1 ATPase activity (PubMed:<a href="http://www.uniprot.org/citations/29127155" target="\_blank">29127155</a>). Competes with the activating co-chaperone AHSA1 for binding to HSP90AA1, thereby providing a reciprocal regulatory mechanism for chaperoning of client proteins (By similarity). Recruits TSC2 to HSP90AA1 and stabilizes TSC2 by preventing the interaction between TSC2 and ubiquitin ligase HERC1 (By similarity).

#### **Cellular Location**

Cytoplasm  
{ECO:0000250|UniProtKB:Q92574}.  
Membrane  
{ECO:0000250|UniProtKB:Q92574};  
Peripheral membrane protein  
{ECO:0000250|UniProtKB:Q92574}.  
Note=At steady state found in association with membranes.  
{ECO:0000250|UniProtKB:Q92574}

Bartolome, A., et al. Endocrinology  
151(7):3084-3094(2010)  
Squarize, C.H., et al. PLoS ONE 5 (5), E10643  
(2010) :

#### **Phospho-mouse TSC1(T310) 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 Cytometry](#)
- [Cell Culture](#)