

Phospho-TSC1(S1080) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3892a

Specification

Phospho-TSC1(S1080) Antibody - Product Information

Application	DB,E
Primary Accession	Q92574
Other Accession	Q9Z136 , Q9EP53 , NP_000359.1
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	129767

Phospho-TSC1(S1080) Antibody - Additional Information

Gene ID 7248

Other Names

Hamartin, Tuberous sclerosis 1 protein, TSC1, KIAA0243, TSC

Target/Specificity

This TSC1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S1080 of human TSC1.

Dilution

DB~~1:500

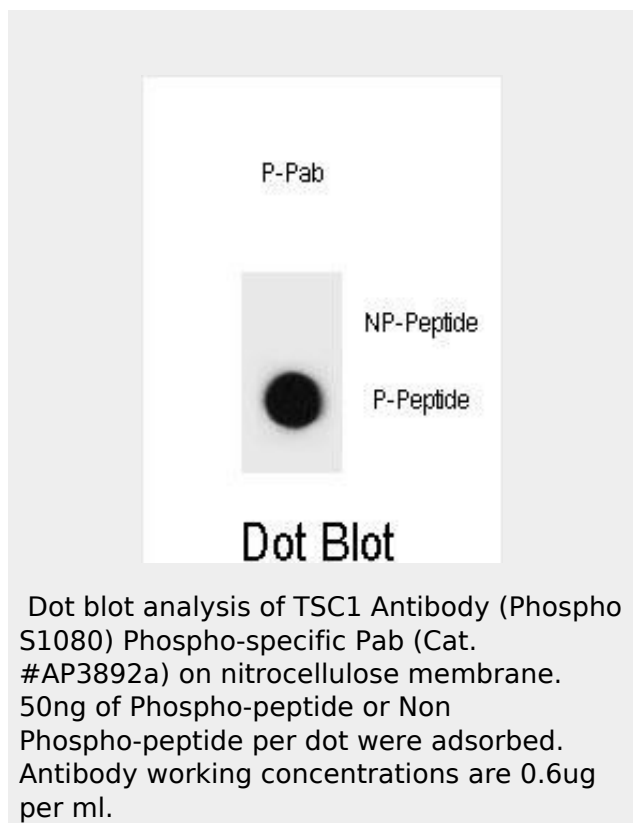
Format

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-TSC1(S1080) Antibody - Background

This gene encodes a growth inhibitory protein thought to play a role in the stabilization of tuberin. Mutations in this gene have been associated with tuberous sclerosis. Alternative splicing results in multiple transcript variants.

Phospho-TSC1(S1080) Antibody - References

Hoogeveen-Westerveld, M., et al. Biochim. Biophys. Acta 1802(9):774-781(2010)
Mehta, M.S., et al. Breast Cancer Res. Treat. (2010) In press :
Mieulet, V., et al. Trends Mol Med 16(7):329-335(2010)
Liu, C.Y., et al. Carcinogenesis

Phospho-TSC1(S1080) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

31(7):1259-1263(2010)
Guo, L., et al. Acta Biochim. Biophys. Sin. (Shanghai) 42(4):266-273(2010)

Phospho-TSC1(S1080) Antibody - Protein Information

Name TSC1

Synonyms KIAA0243, TSC

Function

In complex with TSC2, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling (PubMed:12271141, PubMed:28215400). Seems not to be required for TSC2 GAP activity towards RHEB (PubMed:15340059). Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling (By similarity). Acts as a co-chaperone for HSP90AA1 facilitating HSP90AA1 chaperoning of protein clients such as kinases, TSC2 and glucocorticoid receptor NR3C1 (PubMed:29127155). Increases ATP binding to HSP90AA1 and inhibits HSP90AA1 ATPase activity (PubMed:29127155). Competes with the activating co-chaperone AHSA1 for binding to HSP90AA1, thereby providing a reciprocal regulatory mechanism for chaperoning of client proteins (PubMed:29127155). Recruits TSC2 to HSP90AA1 and stabilizes TSC2 by preventing the interaction between TSC2 and ubiquitin ligase HERC1 (PubMed:16464865, PubMed:29127155).

Cellular Location

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

Tissue Location

Highly expressed in skeletal muscle, followed by heart, brain, placenta, pancreas, lung, liver and kidney. Also expressed in embryonic kidney cells

**Phospho-TSC1(S1080) 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](#)