

Phospho-TSC2(S1096) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3898a

Specification

Phospho-TSC2(S1096) Antibody - Product Information

Application	DB,E
Primary Accession	P49815
Other Accession	NP_000539.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	200608

Phospho-TSC2(S1096) Antibody - Additional Information

Gene ID 7249

Other Names

Tuberin, Tuberous sclerosis 2 protein, TSC2, TSC4

Target/Specificity

This TSC2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S1096 of human TSC2.

Dilution

DB~~1:500

Format

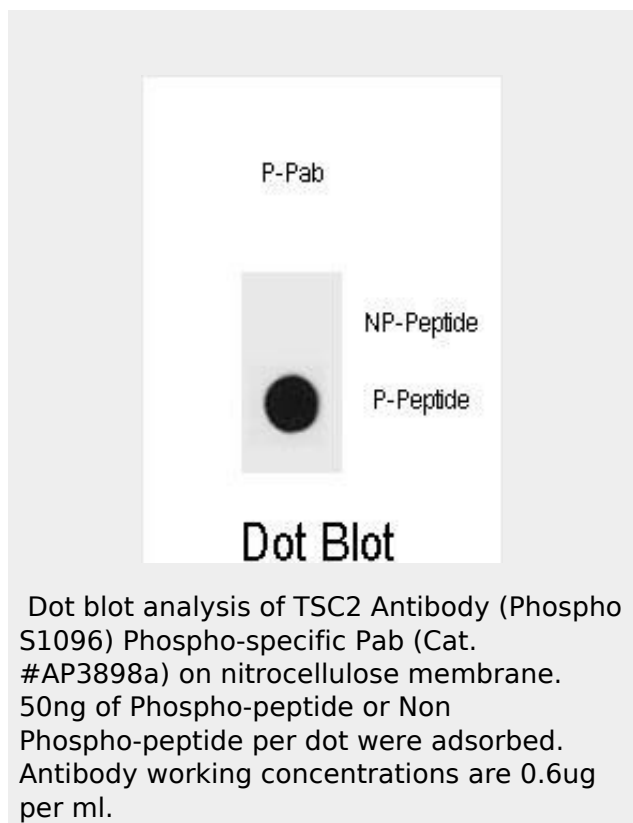
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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-TSC2(S1096) Antibody is for research use only and not for use in



Phospho-TSC2(S1096) Antibody - Background

Mutations in this gene lead to tuberous sclerosis complex. Its gene product is believed to be a tumor suppressor and is able to stimulate specific GTPases. The protein associates with hamartin in a cytosolic complex, possibly acting as a chaperone for hamartin. Alternative splicing results in multiple transcript variants encoding different isoforms.

Phospho-TSC2(S1096) Antibody - References

Slattery, M.L., et al. Carcinogenesis 31(9):1604-1611(2010)
Larson, Y., et al. J. Biol. Chem.

diagnostic or therapeutic procedures.

Phospho-TSC2(S1096) Antibody - Protein Information

Name TSC2

Synonyms TSC4

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 (PubMed:12271141, PubMed:28215400). Acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of mTORC1 (PubMed:15340059). May also play a role in microtubule-mediated protein transport (By similarity). 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

Liver, brain, heart, lymphocytes, fibroblasts, biliary epithelium, pancreas, skeletal muscle, kidney, lung and placenta

285(32):24987-24998(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 31(7):1259-1263(2010)

Phospho-TSC2(S1096) 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](#)