

## 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 Rabbit Host 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**

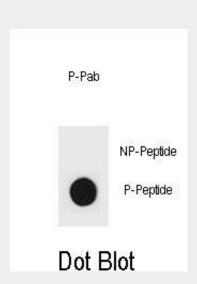
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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



Dot blot analysis of TSC2 Antibody (Phospho S1096) Phospho-specific Pab (Cat. #AP3898a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

# 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

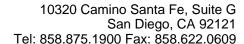
in a cytosolic complex, possibly acting as a chaperone for

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: <a h ref="http://www.uniprot.org/citations/12271 141" target=" blank">12271141</a>, PubMed: <a href="http://www.uniprot.org/ci tations/28215400" target=" blank">28215400</a>). Acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of mTORC1 (PubMed:<a href="http://www.uniprot.org/c itations/15340059" target=" blank">15340059</a>). 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**

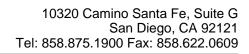
Liver, brain, heart, lymphocytes, fibroblasts, biliary epithelium, pancreas, skeletal muscle, kidney, lung and placenta

# 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 Cytomety

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)





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