For Research Use Only

Tuberin-Specific Polyclonal antibody

Catalog Number: 20004-1-AP

3 Publications



Purification Method:

Antigen affinity purification

Basic Information

Catalog Number:

20004-1-AP

150ul , Concentration: 220 µg/ml by 7249 Bradford method using BSA as the

standard;

Source: Rabbit

Isotype:

GenBank Accession Number:

NM 000548 GeneID (NCBI):

UNIPROT ID: P49815

Full Name:

tuberous sclerosis 2 Calculated MW: 201 kDa

Applications

Tested Applications:

ELISA

Cited Applications:

WB. IF

Species Specificity: human, mouse **Cited Species:**

human, mouse

Background Information

TSC2, also named as TSC4, FLJ43106 and LAM, acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of mTORC1. In complex with TSC1, TSC2 inhibits the nutrientmediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling. TSC2 implicated as a tumor suppressor. It is involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling. TSC2 stimulates weakly the intrinsic GTPase activity of the Rasrelated proteins RAP1A and RAB5 in vitro. Mutations in TSC2 lead to constitutive activation of RAP1A in tumors. Mutations in either TSC2 or the related TSC1 (hamartin) gene cause tuberous sclerosis complex (TSC), an autosomal dominant disorder characterized by development of multiple, widespread non-malignant tumors. The antibody is specific to TSC2.

Notable Publications

Author	Pubmed ID	Journal	Application
Luyao Zhang	32641353	Diabetes	WB
Wenjun Wang	33473107	Nat Commun	WB
John J Bissler	30675765	Physiol Rep	WB,IF

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data