

[KD Validated] Anti-TSC2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

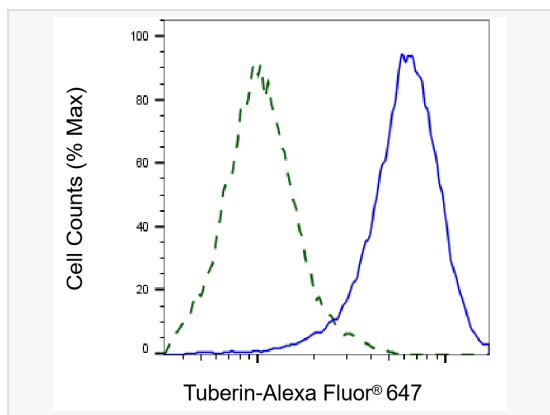
Catalog # R020248

Product Information

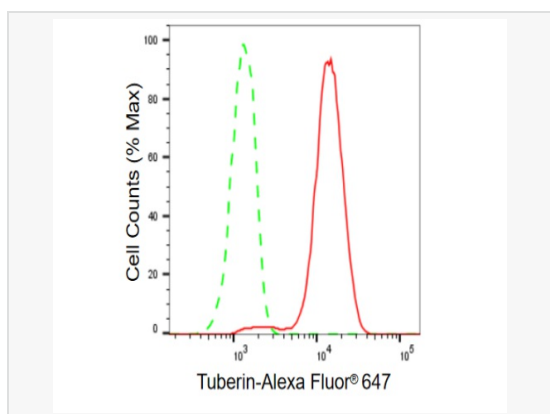
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	85T90T43
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human tuberin
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-TSC2 Rabbit mAb [85T90T43] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

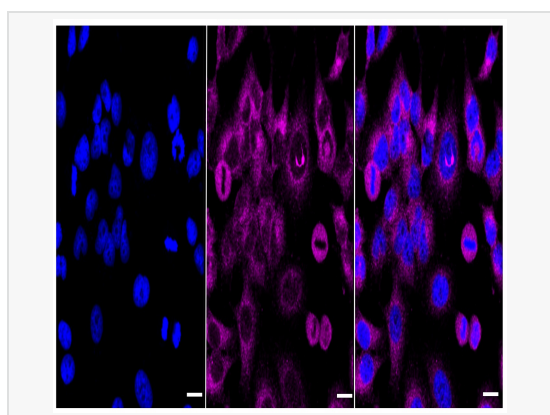
Synonyms	Tuberin; PPP1R160; TSC4; LAM; Protein Phosphatase 1, Regulatory Subunit 160; Tuberous Sclerosis 2 Protein; Tuberous Sclerosis 2.
Calculated MW	Calculated MW: 201 kDa, Observed MW: 200 kDa
Uniprot ID	P49815
Gene ID	7249
Background	Tuberin is a product of the TSC2 tumor suppressor gene and an important regulator of cell proliferation and tumor development. 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. Tuberin is directly phosphorylated at Thr1462 by Akt/PKB. Phosphorylation at Thr1462 and Tyr1571 regulates tuberin-hamartin complexes and tuberin activity.



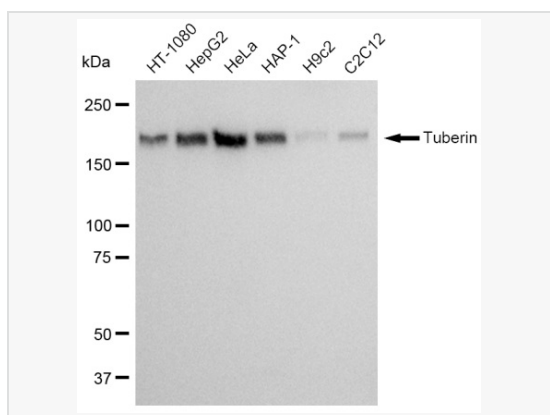
Validation of Tuberin knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Tuberin antibody (R020248, 1:2,000) and analyzed using BD flow cytometer.



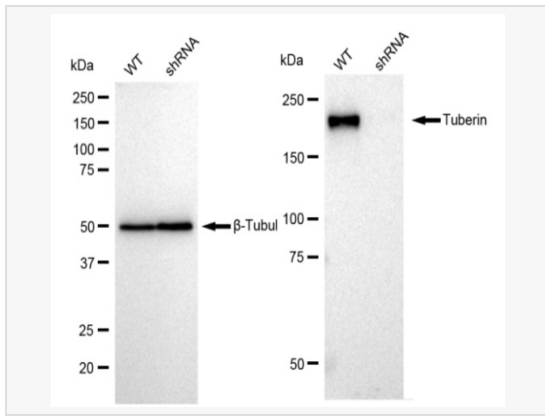
Flow cytometric analysis of Tuberin expression in HeLa cells using Tuberin antibody (R020248, 1:2,000). Green, isotype control; red, Tuberin.



Immunocytochemical staining of HeLa cells with Tuberin antibody (R020248, 1:1,000). Nuclei were stained blue with DAPI; Tuberin was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.



Western blotting analysis using Tuberin antibody (R020248). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Tuberin antibody (R020248, 1:5000) and HRP-conjugated goat anti-rabbit secondary antibody (1:50,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Tuberin antibody (R020248). Tuberin expression in wild type (WT) and Tuberin shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with Tuberin antibody (R020248, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.