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Anti-TSC22 Antibody

Catalog # AP51591

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q15714
Reactivity	Human, Mouse, Rat, Chicken, Bovine, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	109677

Additional Information

Gene ID	8848
Other Names	KIAA1994; TGFB1I4; TSC22; TSC22 domain family protein 1; Cerebral protein 2; Regulatory protein TSC-22; TGFB-stimulated clone 22 homolog; Transforming growth factor beta-1-induced transcript 4 protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human TSC22. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

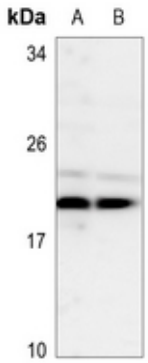
Name	TSC22D1 (HGNC:16826)
Function	Transcriptional repressor (PubMed: 10488076). Acts on the C- type natriuretic peptide (CNP) promoter (PubMed:9022669). Acts to promote CASP3-mediated apoptosis (PubMed:18325344). Positively regulates TGF-beta signaling by interacting with SMAD7 which inhibits binding of SMAD7 to TGFBR1, preventing recruitment of SMURF ubiquitin ligases to TGFBR1 and inhibiting SMURF-mediated ubiquitination and degradation of TGFBR1 (PubMed:21791611). Contributes to enhancement of TGF-beta signaling by binding to and modulating the transcription activator activity of SMAD4 (PubMed:15881652). Promotes TGF-beta- induced transcription of COL1A2; via its interaction with TFE3 at E- boxes in the gene proximal promoter (By similarity). Plays a role in the repression of hematopoietic precursor cell growth (By similarity). Promotes IL2 deprivation-induced apoptosis in T-lymphocytes, via repression of TSC22D3/GILZ transcription and activation of the caspase cascade (PubMed:26752201).

Cellular Location	Cytoplasm. Nucleus {ECO:0000250|UniProtKB:P62500}. Cell membrane; Peripheral membrane protein [Isoform 2]: Cytoplasm. Nucleus Mitochondrion
Tissue Location	Ubiquitously expressed in adult tissues (PubMed:26752201, PubMed:8651929). Expressed in the postmitotic epithelial compartment at the top of intestinal mucosal villi (PubMed:12468551).

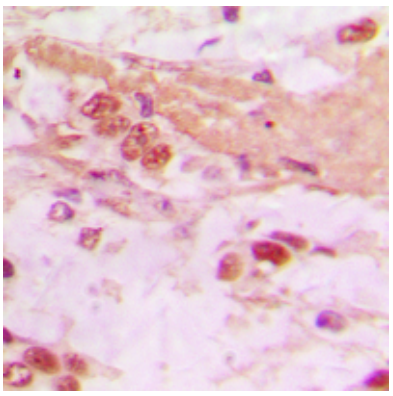
References

Jay P.,et al.Biochem. Biophys. Res. Commun. 222:821-826(1996).
Ohta S.,et al.Eur. J. Biochem. 242:460-466(1996).
Dmitrenko V.V.,et al.Cyt. Genet. 30:41-47(1996).
Yazaki M.,et al.Submitted (AUG-1996) to the EMBL/GenBank/DDBJ databases.
Kawamata H.,et al.Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.

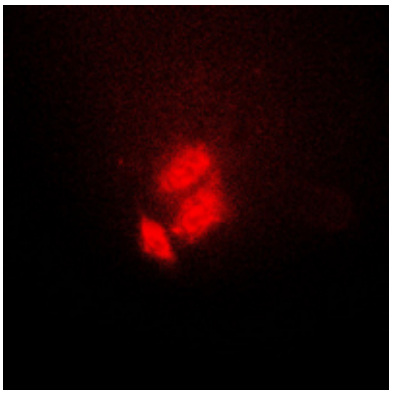
Images



Western blot analysis of TSC22 expression in mouse liver (A), rat liver (B) whole cell lysates. (Predicted band size: 109 kD; Observed band size: 20 kD)



Immunohistochemical analysis of TSC22 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of TSC22 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.