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TSC22D3 Antibody

Catalog # ASC11610

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q99576
Other Accession	NP_932174, 37622903
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	14810
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TSC22D3 antibody can be used for detection of TSC22D3 by Western blot at 1 - 2 □g/mL.

Additional Information

Gene ID	1831
Other Names	TSC22 domain family protein 3, DSIP-immunoreactive peptide, Protein DIP, hDIP, Delta sleep-inducing peptide immunoreactor, Glucocorticoid-induced leucine zipper protein, GILZ, TSC-22-like protein, TSC-22-related protein, TSC-22R, TSC22D3, DSIPI, GILZ
Target/Specificity	TSC22D3;
Reconstitution & Storage	TSC22D3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	TSC22D3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TSC22D3 (HGNC:3051)
Function	Protects T-cells from IL2 deprivation-induced apoptosis through the inhibition of FOXO3A transcriptional activity that leads to the down-regulation of the pro-apoptotic factor BCL2L11 (PubMed:15031210). In macrophages, plays a role in the anti- inflammatory and immunosuppressive effects of glucocorticoids and IL10 (PubMed:12393603). In T-cells, inhibits anti-CD3-induced NFKB1 nuclear translocation and thereby NFKB1 DNA-binding activities (PubMed:11468175). In vitro, suppresses AP-1 transcription factor complex DNA-binding activities (By similarity).
Cellular Location	[Isoform 1]: Cytoplasm {ECO:0000250|UniProtKB:Q9Z2S7}. Nucleus

	{ECO:0000250|UniProtKB:Q9Z2S7} Note=Localization depends on differentiation status of myoblasts (By similarity). In undifferentiated myoblasts; localizes to the cytoplasm, but in differentiating myoblast; localizes to the nucleus (By similarity). {ECO:0000250|UniProtKB:Q9Z2S7}
Tissue Location	Ubiquitously expressed, including in the fetal brain and liver (PubMed:26752201). Expressed in brain, lung, spleen and skeletal muscle (PubMed:11313722, PubMed:12393603). Lower levels detected in heart and kidney (PubMed:11313722, PubMed:12393603). Not detected in the pancreas (PubMed:11313722). In non-lymphoid tissues, in the absence of inflammation, the major source of constitutive expression is the macrophage lineage (PubMed:12393603). Also expressed in cells from different hemopoietic cell lineages, including bone marrow cells, CD34+ stem cells, mature B- and T-cells, monocytes and granulocytes (PubMed:11313722). Down-regulated in activated macrophages from inflammatory lesions of delayed-type hypersensitivity (DTH) reactions, such as in tuberculosis and in Crohn disease, whereas in Burkitt lymphoma, persists in macrophages involved in the phagocytosis of apoptotic malignant cells (PubMed:12393603)

Background

TSC22D3 Antibody: The TSC22 domain family member 3 protein (TSC22D3) is a leucine zipper protein that functions as a transcriptional regulator. The expression of TSC22D3 is stimulated by glucocorticoids and IL-10 and is thought to play a key role in the anti-inflammatory and immunosuppressive effects of these molecules. TSC22D3 can physically interact with and inhibit the activities of key inflammatory signaling mediators such NF-κB and AP-1. TSC22D3 functions as a transcriptional co-activator for various nuclear receptors and NF-κB. It has also been shown to be involved in the differentiation of mesenchymal stem cells towards osteoblasts and bone formation.

References

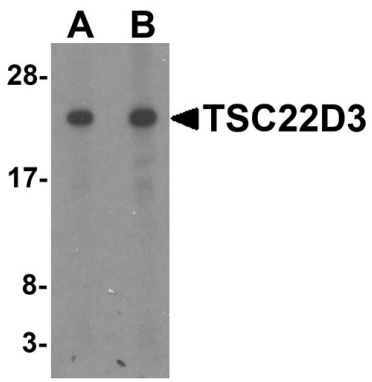
Riccardi C, Cifone MG, and Migliorati G. Glucocorticoid hormone-induced modulation of gene expression and regulation of T-cell death: role of GITR and GILZ, two dexamethasone-induced genes. Cell Death Differ. 1999; 6:1182-9.

Berrebi D, Bruscoli S, Cohen N, et al. Synthesis of glucocorticoid-induced leucine zipper (GILZ) by macrophages: an anti-inflammatory and immunosuppressive mechanism shared by glucocorticoids and IL-10. Blood 2003; 101:729-38

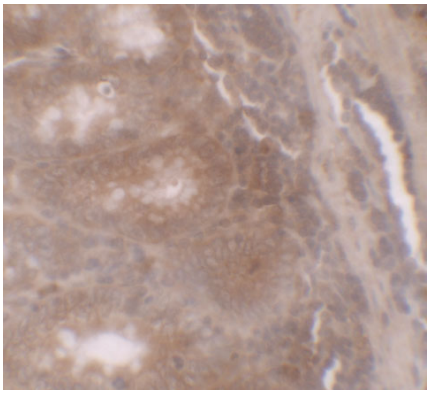
Ayroldi E, Migliorati G, Bruscoli S, et al. Modulation of T-cell activation by the glucocorticoid-induced leucine zipper factor via inhibition of nuclear factor kappaB. Blood 2001; 98:743-53.

Mittelstadt PR and Ashwell JD. Inhibition of AP-1 by the glucocorticoid-inducible protein GILZ. J. Biol. Chem. 2001; 276:29603-10.

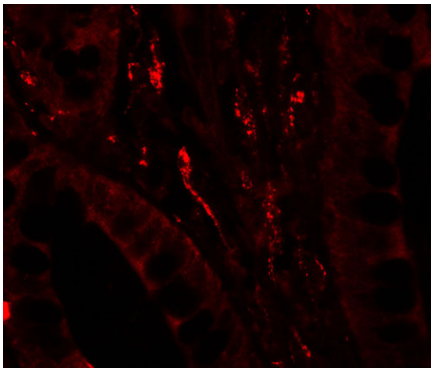
Images



Western blot analysis of TSC22D3 in human small intestine tissue lysate with TSC22D3 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of TSC22D3 in human small intestine tissue with TSC22D3 antibody at 5 µg/ml.



Immunofluorescence of TSC22D3 in human small intestine tissue with TSC22D3 antibody at 20 µg/ml.