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TAZ Rabbit pAb

Catalog # AP100204

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9GZV5
Other Accession	Q9GZV5
Reactivity	Rat, Human, Mouse
Predicted	Pig, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44101
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TAZ
Epitope Specificity	1-100/400
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 WW domain.
Post-translational modifications	Phosphorylated by LATS2 and STK3/MST2. Phosphorylation by LATS2 results in creation of 14-3-3 binding sites, retention in the cytoplasm, and functional inactivation. Phosphorylation results in the inhibition of transcriptional coactivation through YWHAZ-mediated nuclear export.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The transcriptional co-activator with PDZ-binding motif (TAZ) is a 14-3-3-binding molecule. The highly conserved and ubiquitously expressed 14-3-3 proteins regulate differentiation, cell cycle progression and apoptosis by binding intracellular phosphoproteins involved in signal transduction. TAZ may link events at the plasma membrane and cytosketeton to nuclear transcription in a manner that can be regulated by 14-3-3. TAZ shares homology with the WW domain of Yes-associated protein (YAP) and functions as a transcriptional co-activator by binding to the PPXY motif present on transcription factors. TAZ recognizes immunoreactive protein bands in lysates from MDCK, NIH-3T3 and 293T cells. In addition, COS7, Hep G2, CHO and HeLa cells express endogenous TAZ. 14-3-3 binding requires TAZ phosphorylation on a single Serine 89 residue, resulting in the inhibition of TAZ transcriptional co-activation through 14-3-3-mediated nuclear export.

Additional Information

Gene ID	25937
Other Names	TAZ; 2310058J06Rik; 2610021I22Rik; WWTR1_HUMAN; WWTR1; Transcriptional coactivator with PDZ-binding motif; WWTR1_MOUSE; WW domain containing transcription regulator 1

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=3ug /test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	WWTR1 (HGNC:24042)
Function	Transcriptional coactivator which acts as a downstream regulatory target in the Hippo signaling pathway that plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis (PubMed:11118213, PubMed:18227151, PubMed:23911299). The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ (PubMed:18227151). WWTR1 enhances PAX8 and NKX2-1/TTF1-dependent gene activation (PubMed:19010321). In conjunction with YAP1, involved in the regulation of TGFB1-dependent SMAD2 and SMAD3 nuclear accumulation (PubMed:18568018). Plays a key role in coupling SMADs to the transcriptional machinery such as the mediator complex (PubMed:18568018). Regulates embryonic stem-cell self-renewal, promotes cell proliferation and epithelial-mesenchymal transition (PubMed:18227151, PubMed:18568018).
Cellular Location	Nucleus. Cytoplasm. Cell membrane. Cell junction, tight junction {ECO:0000250|UniProtKB:A0A8I3PQN6}. Note=Concentrates along specific portions of the plasma membrane, and accumulates in punctate nuclear bodies (By similarity). When phosphorylated, is retained in the cytoplasm by YWHAZ (By similarity). Can be retained in the nucleus by MED15 (PubMed:18568018). Localized in the cytoplasm in areas of epithelial cell high density (PubMed:21145499). At blastocyst stage expressed in the nucleus in trophectodermal cells, however expressed in the cytoplasm in the inner cell mass (By similarity). In the nucleus, phosphorylation by PRP4K induces nuclear exclusion (PubMed:29695716) Interaction with AMOTL2 results in localization to the cytoplasm and tight junctions (PubMed:23911299). {ECO:0000250|UniProtKB:Q9EPK5, ECO:0000269|PubMed:18568018, ECO:0000269|PubMed:21145499, ECO:0000269|PubMed:23911299, ECO:0000269|PubMed:29695716}
Tissue Location	Highly expressed in kidney, heart, placenta and lung. Expressed in the thyroid tissue.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.