

WWTR1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21026a

Product Information

Application	WB, E
Primary Accession	<u>Q9GZV5</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51589
Calculated MW	44101

Additional Information

Gene ID	25937
Other Names	WW domain-containing transcription regulator protein 1, Transcriptional coactivator with PDZ-binding motif, WWTR1, TAZ
Target/Specificity	This WWTR1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 296-330 amino acids from the C-terminal region of human WWTR1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	WWTR1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	WWTR1 (<u>HGNC:24042</u>)
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: <u>11118213</u> , PubMed: <u>18227151</u> , PubMed: <u>23911299</u>). 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: <u>18227151</u>). WWTR1 enhances PAX8 and NKX2-1/TTF1-dependent gene activation (PubMed: <u>19010321</u>). In conjunction with YAP1, involved in the regulation of TGFB1-dependent SMAD2 and SMAD3 nuclear accumulation (PubMed: <u>18568018</u>). Plays a key role in coupling SMADs to the transcriptional machinery such as the mediator complex (PubMed: <u>18568018</u>). Regulates embryonic stem-cell self-renewal, promotes cell proliferation and epithelial-mesenchymal transition (PubMed: <u>18227151</u> , PubMed: <u>18568018</u>).
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:18568018, 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.

Background

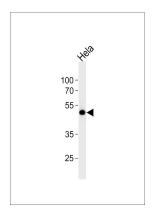
Transcriptional coactivator which acts as a downstream regulatory target in the Hippo signaling pathway that plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 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. WWTR1 enhances PAX8 and NKX2-1/TTF1-dependent gene activation. Regulates the nuclear accumulation of SMADS and has a key role in coupling them to the transcriptional machinery such as the mediator complex. Regulates embryonic stem-cell self-renewal, promotes cell proliferation and epithelial-mesenchymal transition.

References

Kanai F.,et al.EMBO J. 19:6778-6791(2000). Ota T.,et al.Nat. Genet. 36:40-45(2004). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Bechtel S.,et al.BMC Genomics 8:399-399(2007). Olsen J.V.,et al.Cell 127:635-648(2006).

Images

Western blot analysis of lysate from Hela cell line, using WWTR1 Antibody (C-term)(Cat. #AP21026a). AP21026a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



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