

WWTR1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20948c

Specification

WWTR1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>O9GZV5</u> <u>O9EPK5</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 44101

WWTR1 Antibody (C-term) - 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.

WWTR1 Antibody (C-term) - 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:<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:000250|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.

WWTR1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

WWTR1 Antibody (C-term) - Images





Western blot analysis of lysates from Hela cell line and mouse kidney tissue(from left to right), using WWTR1 Antibody (C-term)(Cat. #AP20948c). AP20948c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

WWTR1 Antibody (C-term) - 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.

WWTR1 Antibody (C-term) - 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).