10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

WWTR1 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP20948c

Specification

WWTR1 Blocking Peptide (C-term) - Product Information

Primary Accession	Q9GZV5
Other Accession	Q9EPK5

WWTR1 Blocking Peptide (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
The synthetic peptide sequence is selected from aa 296-310 of HUMAN WWTR1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

WWTR1 Blocking Peptide (C-term) - Protein Information

Name WWTR1

Synonyms TAZ

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). 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:<a href="http://www.uniprot.org/citations/19010321"

target="_blank">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. 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) {ECO:0000250|UniProtKB:Q9EPK5, ECO:0000269|PubMed:18568018, ECO:0000269|PubMed:21145499}

Tissue Location
Highly expressed in kidney, heart, placenta and lung. Expressed in the thyroid tissue.

WWTR1 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

WWTR1 Blocking Peptide (C-term) - Images

WWTR1 Blocking Peptide (C-term) - Background

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WWTR1 Blocking Peptide (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).