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# UMOD Antibody (Center) Blocking Peptide
**Synthetic peptide**
**Catalog # BP14256c**

## Specification

### UMOD Antibody (Center) Blocking Peptide - Product Information

Primary Accession P07911

### UMOD Antibody (Center) Blocking Peptide - Additional Information

**Gene ID** 7369

**Other Names**
Uromodulin, Tamm-Horsfall urinary glycoprotein, THP, Uromodulin, secreted form, UMOD

**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.

### UMOD Antibody (Center) Blocking Peptide - Protein Information

**Name** UMOD

**Function**
[Uromodulin]: Functions in biogenesis and organization of the apical membrane of epithelial cells of the thick ascending limb of Henle's loop (TALH), where it promotes formation of complex filamentous gel-like structure that may play a role in the water barrier permeability (Probable). May serve as a receptor for binding and endocytosis of cytokines (IL-1, IL-2) and TNF (PubMed:<a href="http://www.uniprot.org/citations/3498215" target="_blank">3498215</a>). Facilitates neutrophil migration across renal epithelia (PubMed:<a href="http://www.uniprot.org/citations/20798515" target="_blank">20798515</a>).

**Cellular Location**
Apical cell membrane; Lipid-anchor, GPI-anchor. Basolateral cell membrane; Lipid-anchor, GPI-anchor. Cell projection, cilium membrane. Note=Only a small fraction sorts to the basolateral pole of tubular epithelial cells compared to apical localization (PubMed:22776760). Secreted into urine after cleavage (PubMed:18375198, PubMed:26811476). Colocalizes with NPHP1 and KIF3A (PubMed:20172860).

**Tissue Location**
Expressed in the tubular cells of the kidney. Most abundant protein in normal urine (at protein level). Synthesized exclusively in the kidney. Expressed exclusively by epithelial cells of the thick

ascending limb of Henle's loop (TALH) and of distal convoluted tubule lumen.

**UMOD Antibody (Center) Blocking Peptide - Protocols**

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

- Blocking Peptides

**UMOD Antibody (Center) Blocking Peptide - Images**

**UMOD Antibody (Center) Blocking Peptide - Background**

This gene encodes uromodulin, the most abundant protein innormal urine. Its excretion in urine follows proteolytic cleavageof the ectodomain of its glycosyl phosphatidylinosital-anchoredcounterpart that is situated on the luminal cell surface of theloop of Henle. Uromodulin may act as a constitutive inhibitor ofcalcium crystallization in renal fluids. Excretion of uromodulin inurine may provide defense against urinary tract infections causedby uropathogenic bacteria. Defects in this gene are associated withthe autosomal dominant renal disorders medullary cystic kidneydisease-2 (MCKD2) and familial juvenile hyperuricemic nephropathy(FJHN). These disorders are characterized by juvenile onset ofhyperuricemia, gout, and progressive renal failure. While severaltranscript variants may exist for this gene, the full-lengthnatures of only two have been described to date. These tworepresent the major variants of this gene and encode the sameisoform.

**UMOD Antibody (Center) Blocking Peptide - References**

Mollsten, A., et al. Scand. J. Urol. Nephrol. 44(6):438-444(2010)Kottgen, A., et al. Nat. Genet. 42(5):376-384(2010)Davila, S., et al. Genes Immun. 11(3):232-238(2010)Gudbjartsson, D.F., et al. PLoS Genet. 6 (7), E1001039 (2010) :Pattaro, C., et al. BMC Med. Genet. 11, 41 (2010) :