

# **UMOD / Uromodulin Antibody (clone 10.32)**

Mouse Monoclonal Antibody Catalog # ALS12525

#### **Specification**

### UMOD / Uromodulin Antibody (clone 10.32) - Product Information

Application IHC
Primary Accession P07911
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 70kDa KDa

#### UMOD / Uromodulin Antibody (clone 10.32) - Additional Information

## **Gene ID** 7369

#### **Other Names**

Uromodulin, Tamm-Horsfall urinary glycoprotein, THP, Uromodulin, secreted form, UMOD

### Target/Specificity

Anti-human Tamm-Horsfall protein (THP) is a monoclonal antibody which reacts with an epitope of the urinary mucoprotein. Tamm-Horsfall protein is a glycoprotein of approximately 80 kD containing up to 25% carbohydrate by weight.

## **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

#### **Precautions**

UMOD / Uromodulin Antibody (clone 10.32) is for research use only and not for use in diagnostic or therapeutic procedures.

#### UMOD / Uromodulin Antibody (clone 10.32) - 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**

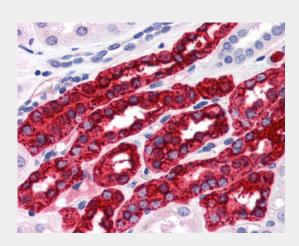
Expressed in the tubular cells of the kidney. Most abundant protein in normal urine (at protein level). Synthesized exclusively in the kidney. Expressed exclusively by epithelial cells of the thick ascending limb of Henle's loop (TALH) and of distal convoluted tubule lumen.

#### UMOD / Uromodulin Antibody (clone 10.32) - Protocols

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

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

#### UMOD / Uromodulin Antibody (clone 10.32) - Images



Anti-UMOD / Uromodulin antibody IHC of human kidney.

#### UMOD / Uromodulin Antibody (clone 10.32) - Background

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 providing the water barrier permeability. May serve as a receptor for binding and endocytosis for cytokines (IL-1, IL-2) and TNF. Facilitates neutrophil migration across renal epithelial.

# UMOD / Uromodulin Antibody (clone 10.32) - References

Pennica D.,et al.Science 236:83-88(1987). Hession C.,et al.Science 237:1479-1484(1987). Hart T.C.,et al.J. Med. Genet. 39:882-892(2002). Ota T.,et al.Nat. Genet. 36:40-45(2004). Martin J.,et al.Nature 432:988-994(2004).



