

Rabbit UMOD Polyclonal Antibody | anti-UMOD antibody

UMOD Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326456	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

UMOD; Polyclonal Antibody; UMOD Antibody; ADMCKD2; FJHN; HNFJ; HNFJ1; MCKD2; medullary cystic kidney disease 2 (autosomal dominant); Tamm Horsfall glycoprotein; Tamm Horsfall urinary glycoprotein; Tamm-Horsfall urinary glycoprotein; THGP; THP; Umod; Urehd1; urehr4; UROM_HUMAN; uromodulin (uromucoid; Tamm-Horsfall glycoprotein); Uromodulin; secreted form; anti-UMOD antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	UMOD antibody detects endogenous levels of total UMOD
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	640
Applicable Applications for anti-UMOD antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human UMOD
Subcellular Location	Cell Membrane. Secreted. Secreted after cleavage in the urine.
Tissue Specificity	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.
Predicted Cross Reactivity	Pig, Bovine, Sheep, Rabbit, Dog
Similarity	Pig (100%), Bovine (100%), Sheep (100%), Rabbit (88%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohiostchemistry)
AAA326456 at 1/100 staining Mouse kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts of MDA-MB453, using UMOD antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-UMOD antibody

Description: This gene encodes uromodulin, the most abundant protein in normal urine. Its excretion in urine follows proteolytic cleavage of the ectodomain of its glycosyl phosphatidylinositol-anchored counterpart that is situated on the luminal cell surface of the loop of Henle. Uromodulin may act as a constitutive inhibitor of calcium crystallization in renal fluids. Excretion of uromodulin in urine may provide defense against urinary tract infections caused by uropathogenic bacteria. Defects in this gene are associated with the autosomal dominant renal disorders medullary cystic kidney disease-2 (MCKD2) and familial juvenile hyperuricemic nephropathy (FJHN). These disorders are characterized by juvenile onset of hyperuricemia, gout, and progressive renal failure. While several transcript variants may exist for this gene, the full-length natures of only two have been described to date. These two represent the major variants of this gene and encode the same isoform. [provided by RefSeq, Jul 2008]
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:3498215). Facilitates neutrophil migration across renal epithelia (PubMed:20798515).
Subunit Structure: Uromodulin, secreted form: homodimer that then polymerizes into long filaments.
Post-translational Modifications: N-glycosylated (PubMed:19005207, PubMed:26673890, PubMed:26811476). N-glycan heterogeneity at Asn-232: Hex7HexNAc6 (major) and dHex1Hex7HexNAc6 (minor); at Asn-322: dHex1Hex6HexNAc5 (minor), dHex1Hex7HexNAc6 (major) and dHex1Hex8HexNAc7 (minor); at Asn-396: Hex6HexNAc5 (major), dHex1Hex6HexNAc5 (minor) and Hex7HexNAc6 (minor) (PubMed:22171320).
Proteolytically cleaved at a conserved C-terminal proteolytic cleavage site to generate the secreted form found in urine (PubMed:18375198, PubMed:19005207). This cleavage is catalyzed by HPN (PubMed:26673890).
Similarity: The ZP domain mediates polymerization, leading to the formation of long filaments.

NCBI AND UNIPROT INFORMATION

NCBI GI #	56550049
NCBI GeneID	7369
NCBI Accession #	NP_001008390.1
NCBI GenBank Nucleotide #	NM_001008389.2
UniProt Accession #	P07911; Q540J6; Q6ZS84; Q8IYG0; B3KP48; B3KRN9; E9PEA4
Molecular Weight	Observed: 70 kDa Predicted: 70 kDa
NCBI Official Full Name	uromodulin isoform a preproprotein
NCBI Official Synonym Full Names	uromodulin
NCBI Official Symbol	UMOD
NCBI Official Synonym Symbols	THP; FJHN; HNFJ; THGP; HNFJ1; MCKD2; ADMCKD2
NCBI Protein Information	uromodulin
UniProt Protein Name	Uromodulin
UniProt Gene Name	UMOD

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/umod-antibody-immunohistochemistry-western-blot-elisa/326456>