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UMOD Rabbit pAb

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Catalog # AP57977

Product Information

Application	WB, IHC-P, IHC-F, IF
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse UMOD
Epitope Specificity	351-450/642
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Apical cell membrane; Lipid-anchor, GPI-anchor (By similarity). Basolateral cell membrane; Lipid-anchor, GPI-anchor (By similarity). Cell projection, cilium membrane (By similarity). Note=Only a small fraction is sorts to the basolateral pole of tubular epithelial cells compared to apical localization (By similarity).Uromodulin, secreted form: Secreted (By similarity).
DISEASE	Defects in UMOD are the cause of familial juvenilehyperuricemic nephropathy type 1 (HNFJ1) [MIM:162000]. HNFJ1 is arenal disease characterized by juvenil onset of hyperuricemia,polyuria, progressive renal failure, and gout. The disease isassociated with interstitial pathological changes resulting infibrosis.Defects in UMOD are the cause of medullary cystic kidneydisease type 2 (MCKD2) [MIM:603860]. MCKD2 is a form oftubulointerstitial nephropathy characterized by formation of renalcysts at the corticomedullary junction. It is characterized byadult onset of impaired renal function and salt wasting resultingin end-stage renal failure by the sixth decade.Defects in UMOD are the cause of glomerulocystic kidneydisease with hyperuricemia and isosthenuria (GCKDHI) [MIM:609886].GCKDHI is a renal disorder characterized by a cystic dilation ofBowman space, a collapse of glomerular tuft, and hyperuricemia dueto low fractional excretion of uric acid and severe impairment ofurine concentrating ability.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is the most abundant protein in mammalian urine under physiological conditions. 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. This protein may act as a constitutive inhibitor of calcium crystallization in renal fluids. Excretion of this protein in urine may provide defense against urinary tract infections caused by uropathogenic bacteria. Defects in this gene are associated with the renal disorders medullary cystic kidney disease-2 (MCKD2), glomerulocystic kidney disease with hyperuricemia and isosthenuria (GCKDHI), and familial juvenile hyperuricemic nephropathy (FJHN). Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2013].

Additional Information

Other Names	Uromodulin, Tamm-Horsfall urinary glycoprotein, THP, Uromodulin, secreted form, Umod
Dilution	WB=1:500-2000,IHC-P=1:400-800,IHC-F=1:400-800,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Background

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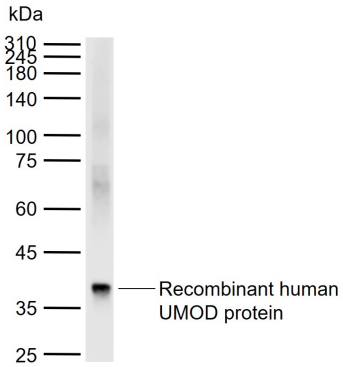
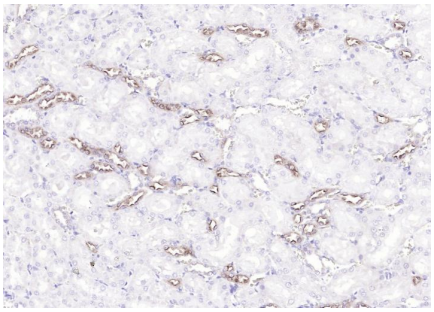
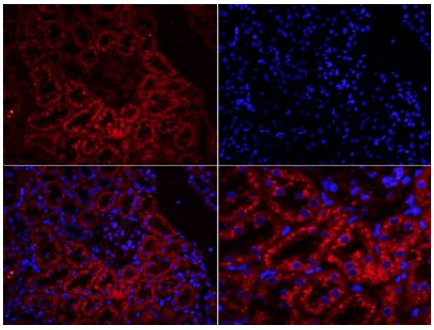
Images



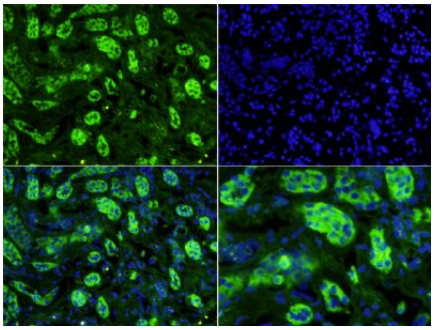
Sample:
Lane 1: Recombinant human UMOD protein, N-His
Primary: Anti-UMOD (AP57977) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 69 kDa
Observed band size: 37 kDa



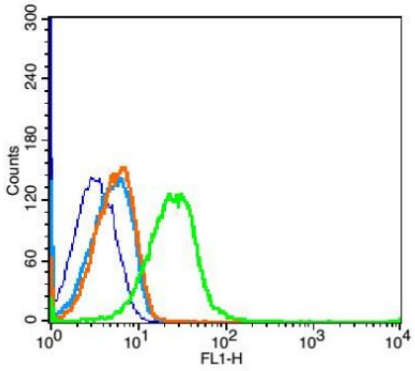
Paraformaldehyde-fixed, paraffin embedded Rat Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with UMOD Polyclonal Antibody, Unconjugated (AP57977) at 1:200 overnight at 4°C, followed by conjugation to the AP57977-HRP and DAB (C-0010) staining.



Tissue/cell: rat kidney tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Uromucoid Polyclonal Antibody, Unconjugated(AP57977) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(bs-0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Tissue/cell: human kidney tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Uromucoid Polyclonal Antibody, Unconjugated(AP57977) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(bs-0295G-FITC)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control: Mouse kidney (blue).
Primary Antibody:Rabbit Anti-Coxsackie Adenovirus Receptor antibody (AP57977,Green); Dilution: 1 μg in 100 μL 1X PBS containing 0.5% BSA;
Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions;
Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.
Protocol
The cells were fixed with 2% paraformaldehyde for 10 min at 37℃. Primary antibody (AP57977, 1 μg /1x10^6 cells) were incubated for 30 min at room temperature, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (1 hour) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/FITC antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 40 min at room temperature. Acquisition of 20,000 events was performed.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.