



THP Monoclonal Antibody

Catalog No	YP-mAb-04241
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	UMOD
Protein Name	Uromodulin
Immunogen	The antiserum was produced against synthesized peptide derived from human THP. AA range:329-378
Specificity	THP Monoclonal Antibody detects endogenous levels of THP protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	UMOD; Uromodulin; Tamm-Horsfall urinary glycoprotein; THP
Observed Band	70kD
Cell Pathway	Apical cell membrane ; Lipid-anchor, GPI-anchor . Basolateral cell membrane ; Lipid-anchor, GPI-anchor . Cell projection, cilium membrane . 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). . ; [Uromodulin, secreted form]: Secreted . Detected in 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.
Function	disease:Defects in UMOD are a cause of glomerulocystic kidney disease with hyperuricemia and isosthenuria [MIM:609886]. Glomerulocystic kidney disease (GCKD) and medullary cystic disease/familial juvenile hyperuricemic nephropathy (MCKD/HNFJ) are two distinct renal disorders that share some common clinical features. The former is characterized by a cystic dilatation of Bowman's space and a collapse of glomerular tuft. Familial GCKD can be associated with either hypoplastic or normal sized kidneys. A GCKD clinical variant presents the association with hyperuricemia due to low fractional excretion of uric acid and



severe impairment of urine concentrating ability that are reminiscent of MCKD/HNFJ.,disease:Defects in UMOD are the cause of familial juvenile hyperuricemic nephropathy (HNFJ) [MIM:162000]. HNFJ is a heritable autosomal dominant renal disease characterized by juvenil onset of hyp

Background

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],

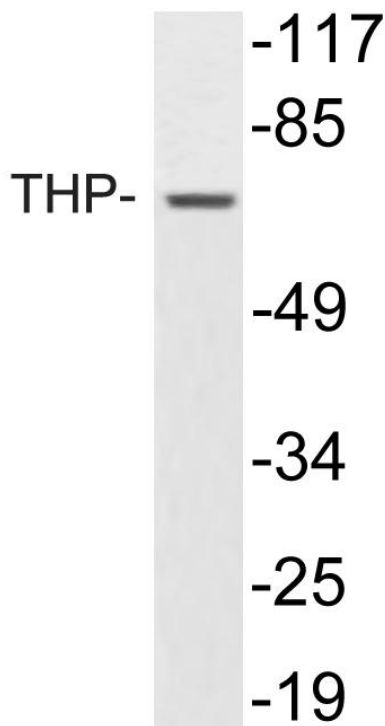
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using THP Monoclonal Antibody