

Product datasheet

Anti-UMOD antibody [EPR20071] ab207170

Recombinant RabMAb

★★★★★ [3 Abreviews](#) [5 References](#) [8 Images](#)

Overview

Product name	Anti-UMOD antibody [EPR20071]
Description	Rabbit monoclonal [EPR20071] to UMOD
Host species	Rabbit
Tested applications	Suitable for: IHC-P, IP, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human urine and fetal kidney lysate; mouse and rat kidney lysates. IHC-P: Human, mouse and rat kidney tissues. IP: Human kidney lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20071
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab207170 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (1)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.
WB		1/1000. Detects a band of approximately 110 kDa (predicted molecular weight: 70 kDa).

Target

Function

Not known. May play a role in regulating the circulating activity of cytokines as it binds to IL-1, IL-2 and TNF with high affinity.

Tissue specificity

Synthesized by kidney. Most abundant protein in normal human urine.

Involvement in disease

Defects in UMOD are the cause of familial juvenile hyperuricemic nephropathy type 1 (HNFJ1) [MIM:162000]. HNFJ1 is a renal disease characterized by juvenile onset of hyperuricemia, polyuria, progressive renal failure, and gout. The disease is associated with interstitial pathological changes resulting in fibrosis.

Defects in UMOD are the cause of medullary cystic kidney disease type 2 (MCKD2) [MIM:603860]. MCKD2 is a form of tubulointerstitial nephropathy characterized by formation of renal cysts at the corticomedullary junction. It is characterized by adult onset of impaired renal function and salt wasting resulting in end-stage renal failure by the sixth decade.

Defects in UMOD are the cause of glomerulocystic kidney disease with hyperuricemia and isosthenuria (GCKDHI) [MIM:609886]. GCKDHI is a renal disorder characterized by a cystic dilation of Bowman space, a collapse of glomerular tuft, and hyperuricemia due to low fractional excretion of uric acid and severe impairment of urine concentrating ability.

Sequence similarities

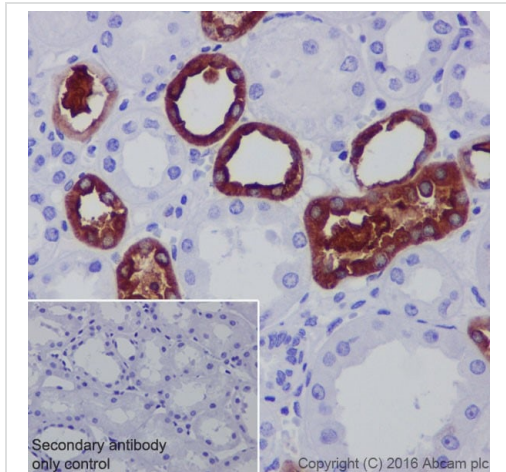
Contains 3 EGF-like domains.

Contains 1 ZP domain.

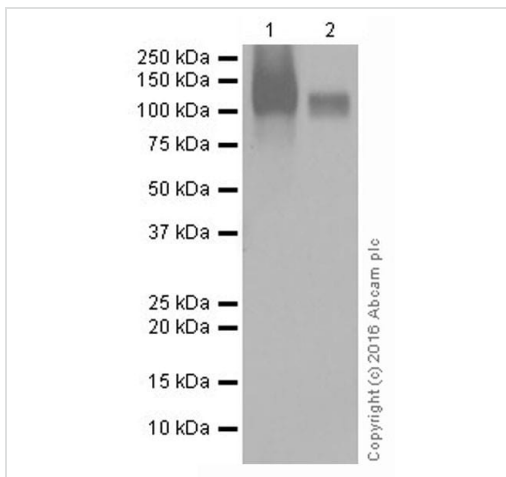
Cellular localization

Cell membrane. Secreted. Secreted after cleavage in the urine.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-UMOD antibody [EPR20071] (ab207170)



Western blot - Anti-UMOD antibody [EPR20071] (ab207170)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling UMOD with ab207170 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Strong cytoplasmic staining on distal convoluted is observed [PMID: 23988501].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

All lanes : Anti-UMOD antibody [EPR20071] (ab207170) at 1/10000 dilution

Lane 1 : Human urine

Lane 2 : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/100000 dilution

Predicted band size: 70 kDa

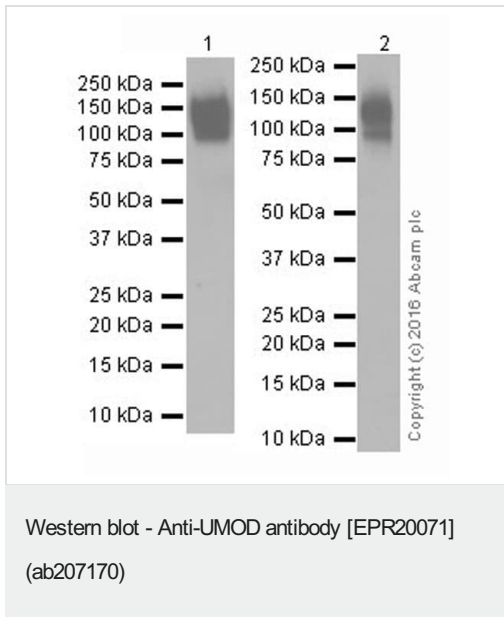
Observed band size: 110 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The MW observed is consistent with the literature (PMID:

18310901).



All lanes : Anti-UMOD antibody [EPR20071] (ab207170) at 1/1000 dilution

Lane 1 : Mouse kidney lysate

Lane 2 : Rat kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

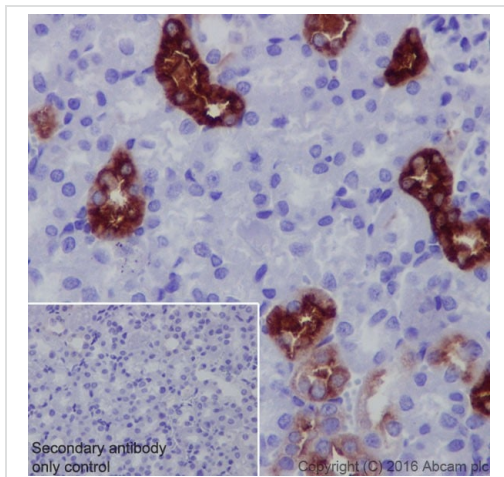
Predicted band size: 70 kDa

Observed band size: 110 kDa

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFDM/TBST.

The MW observed is consistent with the literature (PMID: 18310901).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-UMOD antibody [EPR20071] (ab207170)

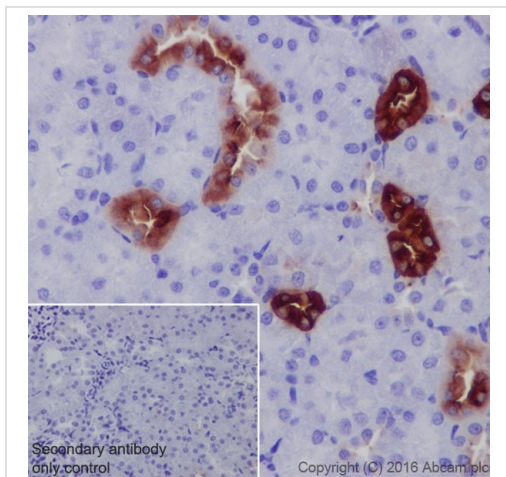
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling UMOD with ab207170 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Strong cytoplasmic staining on distal convoluted tubules of mouse kidney is observed [PMID: 23988501].

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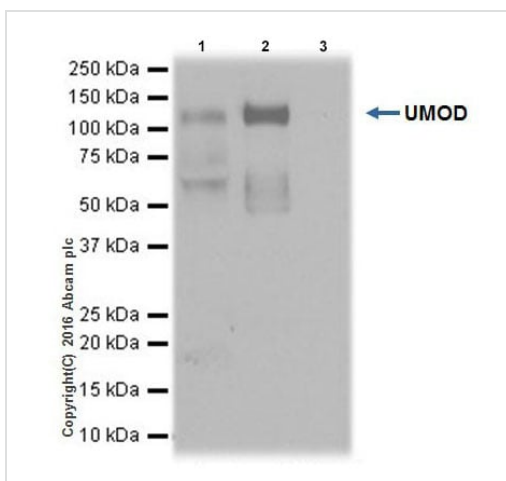
Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling UMOD with ab207170 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Strong cytoplasmic staining on distal convoluted tubules of rat kidney is observed [PMID: 23988501].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-UMOD antibody [EPR20071] (ab207170)

UMOD was immunoprecipitated from 0.35 mg of human kidney lysate with ab207170 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab207170 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/1000 dilution.

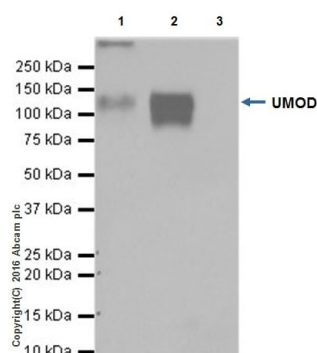
Lane 1: Human kidney lysate 10µg (Input).

Lane 2: ab207170 IP in human kidney lysate.

Lane 3: Rabbit IgG, monoclonal [EPR25A] - Isotype Control ([ab172730](#)) instead of ab207170 in human kidney lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 0.5 second.



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[EPR20071] (ab207170)

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Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-UMOD antibody [EPR20071] (ab207170)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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