

Product datasheet

Anti-UMOD antibody [EPR20071] - BSA and Azide free ab223540

Recombinant RabMAb

6 Images

Overview

Product name	Anti-UMOD antibody [EPR20071] - BSA and Azide free
Description	Rabbit monoclonal [EPR20071] to UMOD - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, IP, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment aa 1-350. The exact sequence is proprietary. Database link: P07911
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>ab223540 is the carrier-free version of ab207170 This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>Ab223540 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. <i>Maxpar® is a trademark of Fluidigm Canada Inc.</i></p> <p>Previously labelled as Uromucoid.</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> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in</p>

our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20071
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab223540** 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		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. 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

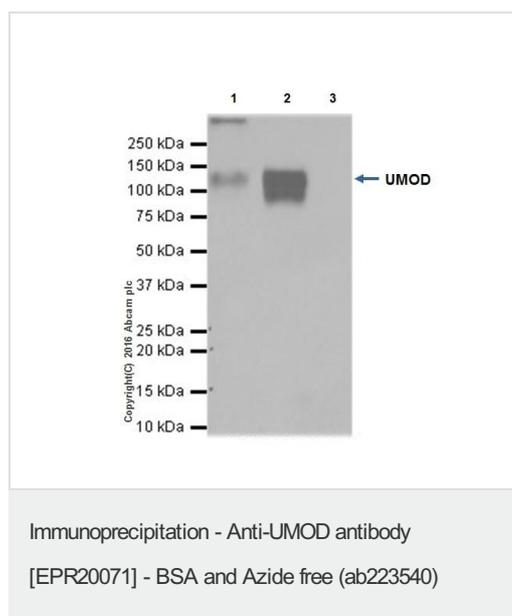
Contains 3 EGF-like domains.

Contains 1 ZP domain.

Cellular localization

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

Images



UMOD was immunoprecipitated from 0.35 mg of mouse 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).

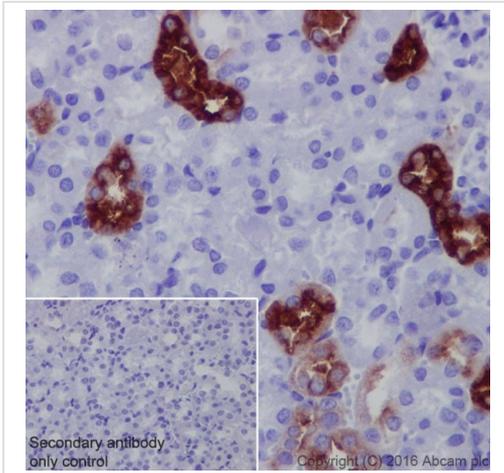
Lane 2: [ab207170](#) IP in human kidney lysate.

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

Blocking and dilution buffer and concentration: 5% NFD/MTBST.

Exposure time: 0.5 second.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab207170](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-UMOD antibody [EPR20071] - BSA and Azide free (ab223540)

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.

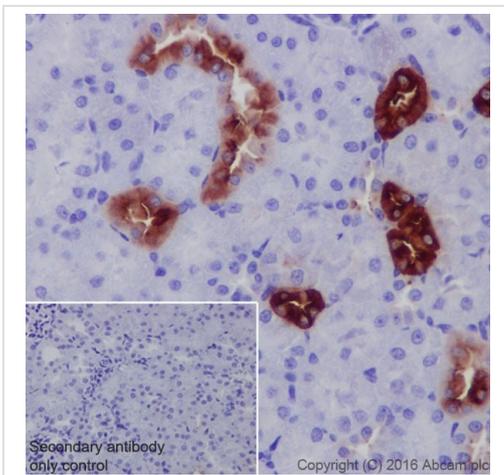
Strong cytoplasmic staining on distal convoluted tubules of mouse kidney is observed [PMID: 23988501].

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab207170](#)).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-UMOD antibody [EPR20071] - BSA and Azide free (ab223540)

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.

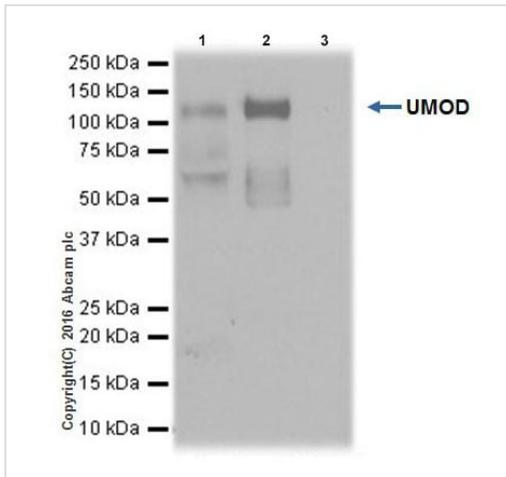
Strong cytoplasmic staining on distal convoluted tubules of rat kidney is observed [PMID: 23988501].

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab207170](#)).

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



Immunoprecipitation - Anti-UMOD antibody [EPR20071] - BSA and Azide free (ab223540)

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).

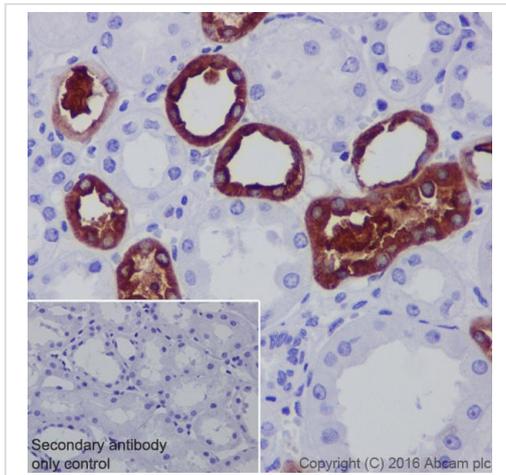
Lane 2: [ab207170](#) IP in human kidney lysate.

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab207170](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-UMOD antibody [EPR20071] - BSA and Azide free (ab223540)

This IHC data was generated using the same anti-UMOD antibody clone [EPR20071] in a different buffer formulation (cat# [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.

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] - BSA and Azide free (ab223540)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors