

## Product datasheet

# Anti-MRP4 antibody [EPR20403] ab233382

Recombinant RabMAb

8 Images

### Overview

<b>Product name</b>	Anti-MRP4 antibody [EPR20403]
<b>Description</b>	Rabbit monoclonal [EPR20403] to MRP4
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, IHC-P, WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment within Human MRP4 aa 1050 to the C-terminus. The exact sequence is proprietary. Database link: <a href="#">O15439</a>
<b>Positive control</b>	WB: HeLa, NIH:OVCAR-3, A549, LNCaP and U-2 OS whole cell lysates. IHC-P: Human ovarian cancer, kidney and prostate tissues. ICC/IF: LNCaP and A549 cells. IP: U-2 OS whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</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 &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise<sup>™</sup> guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p>

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

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR20403
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab233382** in the following tested applications.

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

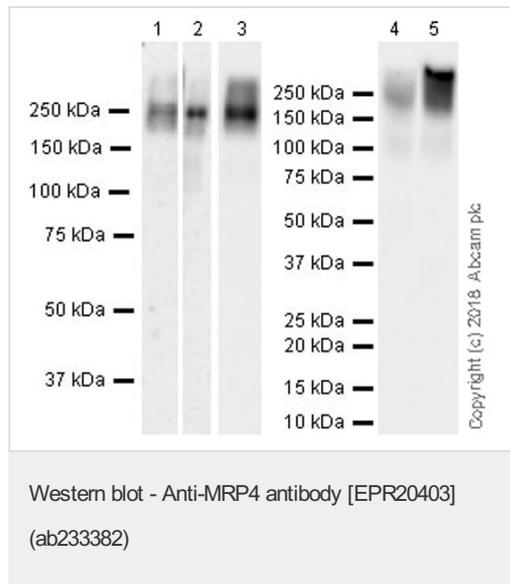
Application	Abreviews	Notes
IP		1/30.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 220-250 kDa (predicted molecular weight: 150 kDa).
ICC/IF		1/50.

## Target

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<b>Function</b>	May be an organic anion pump relevant to cellular detoxification.
<b>Tissue specificity</b>	Widely expressed, with particularly high levels in prostate, but is barely detectable in liver.
<b>Sequence similarities</b>	Belongs to the ABC transporter superfamily. ABCC family. Conjugate transporter (TC 3.A.1.208) subfamily. Contains 2 ABC transmembrane type-1 domains. Contains 2 ABC transporter domains.
<b>Cellular localization</b>	Membrane.

## Images



**All lanes :** Anti-MRP4 antibody [EPR20403] (ab233382) at 1/1000 dilution

**Lane 1 :** HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 10  $\mu$ g

**Lane 2 :** NIH:OVCAR-3 (human ovary adenocarcinoma cell line) whole cell lysate at 10  $\mu$ g

**Lane 3 :** A549 (human lung carcinoma cell line) whole cell lysate at 10  $\mu$ g

**Lane 4 :** U-2 OS (human bone osteosarcoma epithelial cell line) whole cell lysate at 20  $\mu$ g

**Lane 5 :** LNCaP (human prostate cancer cell line) whole cell lysate at 20  $\mu$ g

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 150 kDa

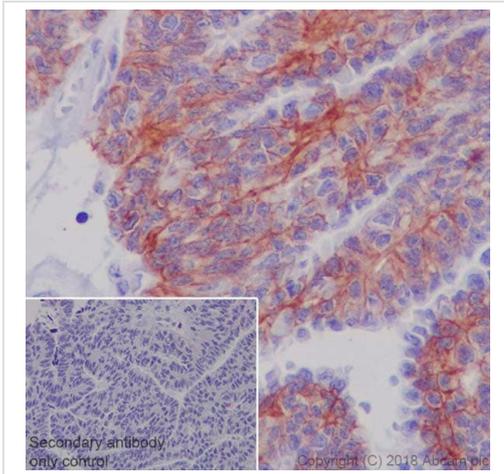
**Observed band size:** 220-250 kDa

[why is the actual band size different from the predicted?](#)

**Exposure time :** Lanes 1-2: 3 minutes, Lane 3: 32 seconds, Lanes 4-5: 2 minutes.

Blocking/Dilution buffer: 5% NFDm/TBST.

The expression profile observed is consistent with the literature (PMID: 15827327).

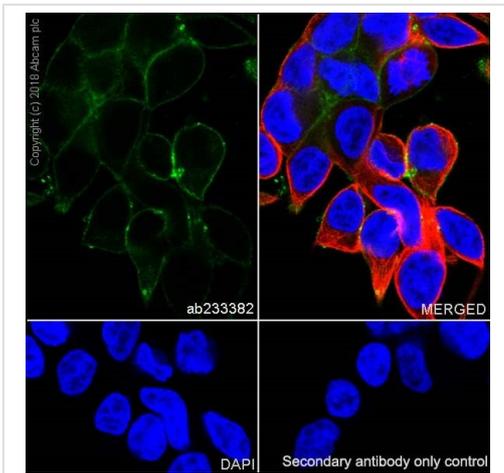


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MRP4 antibody [EPR20403] (ab233382)

Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissue labeling MRP4 with ab233382 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on human ovarian cancer cells is observed. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

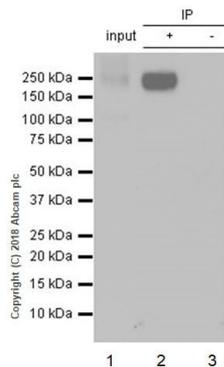


Immunocytochemistry/ Immunofluorescence - Anti-MRP4 antibody [EPR20403] (ab233382)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized LNCaP (human prostate cancer cell line) cells labeling MRP4 with ab233382 at 1/50 dilution, followed by by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on the LNCaP cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution.



Immunoprecipitation - Anti-MRP4 antibody  
[EPR20403] (ab233382)

MRP4 was immunoprecipitated from 0.35 mg U-2 OS (human bone osteosarcoma epithelial cell line) whole cell lysate with ab233382 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab233382 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Lane 1: U-2 OS whole cell lysate 10 µg (Input).

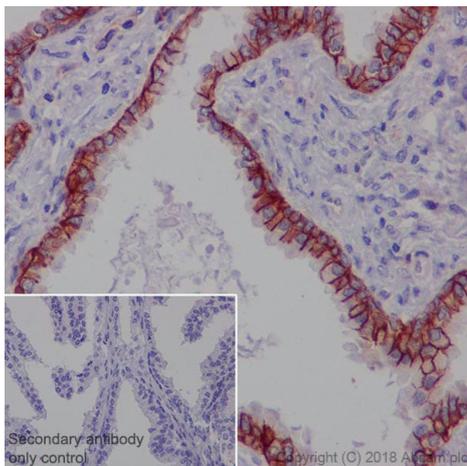
Lane 2: ab233382 IP in U-2 OS whole cell lysate (+).

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab233382 in U-2 OS whole cell lysate (-).

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

The molecular mass observed is consistent with the literature (PMID: 15827327).

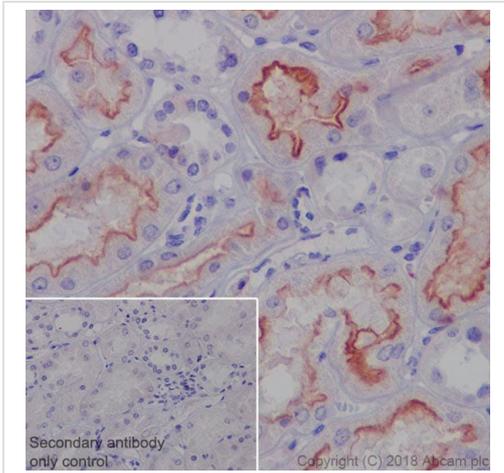


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MRP4 antibody  
[EPR20403] (ab233382)

Immunohistochemical analysis of paraffin-embedded human prostate tissue labeling MRP4 with ab233382 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Basolateral membrane staining on human prostate epithelia (PMID:18615486, PMID:25840885). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

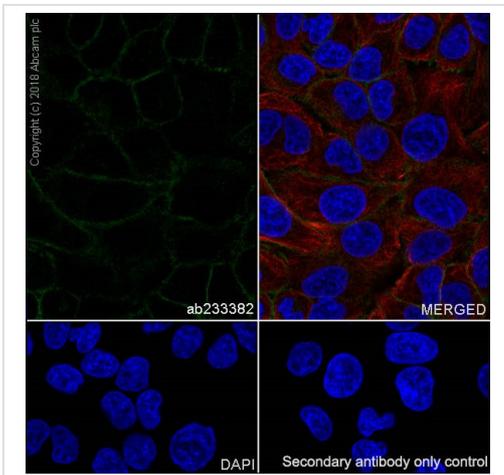


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MRP4 antibody [EPR20403] (ab233382)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling MRP4 with ab233382 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. MRP4 is expressed at the apical (brush border) membrane of human kidney tubules (PMID: 11856762). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-MRP4 antibody [EPR20403] (ab233382)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A549 (human lung carcinoma epithelial cell) cells labeling MRP4 with ab233382 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on the A549 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution.

### 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-MRP4 antibody [EPR20403] (ab233382)

**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

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- 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.

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