abcam

Product datasheet

Anti-MRP4 antibody [EPR20403] ab233382

Recombinant RabMAb

1 References 8 Images

Overview

Product name Anti-MRP4 antibody [EPR20403]

Description Rabbit monoclonal [EPR20403] to MRP4

Host species Rabbit

Tested applications Suitable for: IP, IHC-P, WB, ICC/IF

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control 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.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR20403

Isotype lgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> 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

Function May be an organic anion pump relevant to cellular detoxification.

Tissue specificity Widely expressed, with particularly high levels in prostate, but is barely detectable in liver.

Sequence similaritiesBelongs to the ABC transporter superfamily. ABCC family. Conjugate transporter (TC 3.A.1.208)

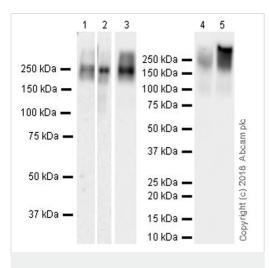
subfamily.

Contains 2 ABC transmembrane type-1 domains.

Contains 2 ABC transporter domains.

Cellular localization Membrane.

Images



Western blot - Anti-MRP4 antibody [EPR20403] (ab233382)

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 µg

Lane 2: NIH:OVCAR-3 (human ovary adenocarcinoma cell line)

whole cell lysate at 10 µg

Lane 3: A549 (human lung carcinoma cell line) whole cell lysate at

10 µg

Lane 4: U-2 OS (human bone osteosarcoma epithelial cell line)

whole cell lysate at 20 µg

Lane 5: LNCaP (human prostate cancer cell line) whole cell lysate

at 20 µg

Secondary

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

dilution

Predicted band size: 150 kDa

Observed band size: 220-250 kDa

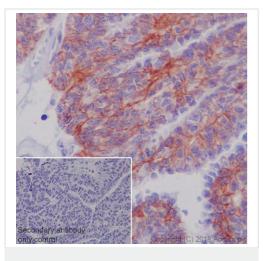
Exposure time : Lanes 1-2: 3 minutes, Lane 3: 32 seconds, Lanes

4-5: 2 minutes.

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression profile observed is consistent with the literature

(PMID: 15827327).

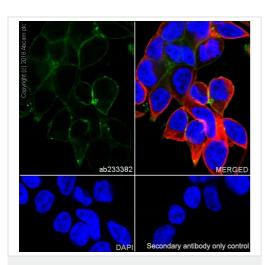


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MRP4 antibody
[EPR20403] (ab233382)

Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissue labeling MRP4 with ab233382 at 1/100 dilution, followed by Goat Anti-Rabbit lgG 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 lgG 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.

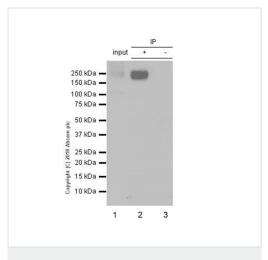


Immunocytochemistry/ Immunofluorescence - Anti-MRP4 antibody [EPR20403] (ab233382)

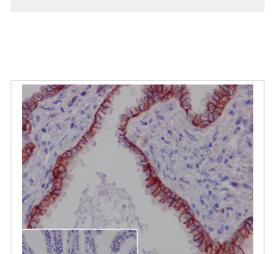
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized LNCaP (human prostate cancer cell line) cells labeling MRP4 with ab233382 at 1/50 dilution, followed by by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). 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[®] 594) (**ab195889**) (red) at 1/200 dilution.

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



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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - 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 $\lg G(\underline{ab172730})$ instead of ab233382 in U-2 OS whole cell lysate (-).

Blocking/Dilution buffer: 5% NFDM/TBST.

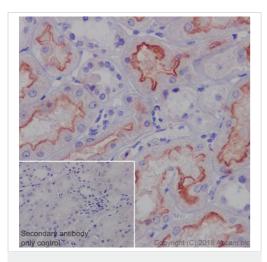
Exposure time: 3 minutes.

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

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 lgG 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.

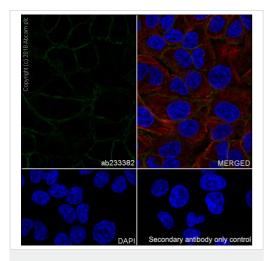


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MRP4 antibody
[EPR20403] (ab233382)

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 lgG 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.

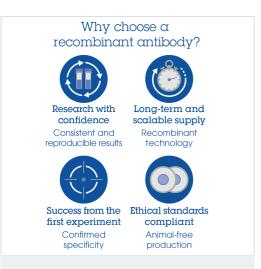


Immunocytochemistry/ Immunofluorescence - Anti-MRP4 antibody [EPR20403] (ab233382)

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® 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[®] 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® 488) (ab150077) secondary antibody at 1/1000 dilution.



Anti-MRP4 antibody [EPR20403] (ab233382)

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