**Product name**
Anti-MRP4 antibody [M4I-10]

**Description**
Rat monoclonal [M4I-10] to MRP4

**Host species**
Rat

**Tested applications**
Suitable for: IHC-P, WB

**Species reactivity**
Reacts with: Mouse, Human

**Immunogen**
Fusion protein corresponding to Human MRP4 aa 350-450. Fusion protein containing the E. coli maltose binding protein and a fragment of the human MRP4 protein corresponding to amino acids 372-431.

**Positive control**
Kidney tissue This antibody gave a positive result in IHC in the following FFPE tissue: Human lung adenocarcinoma.

**General notes**
The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

**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. Avoid freeze / thaw cycle.

**Storage buffer**
pH: 7.30
Preservative: 0.02% Sodium azide
Constituents: 0.1% BSA, PBS

**Purity**
Tissue culture supernatant

**Clonality**
Monoclonal

**Clone number**
M4I-10
Isotype

IgG2a

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab15602 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<td>IHC-P</td>
<td></td>
<td>Use a concentration of 10 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
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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 similarities

Contains 2 ABC transmembrane type-1 domains.
Contains 2 ABC transporter domains.

Cellular localization

Membrane.

Images

**All lanes**: Anti-MRP4 antibody [M4I-10] (ab15602) at 20 µg/ml

**Lane 1**: Wild-type HAP1 whole cell lysate

**Lane 2**: ABCC4 (MRP4) knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size**: 159 kDa

**Lanes 1 - 2**: Merged signal (red and green). Green - ab15602 observed at 200-250 kDa. Red - loading control, ab176560, observed at 50 kDa.

ab15602 was shown to specifically react with MRP4 in wild-type HAP1 cells as signal was lost in ABCC4 (MRP4) knockout cells.
Wild-type and ABCC4 (MRP4) knockout samples were subjected to SDS-PAGE. Ab15602 and \textbf{ab176560} (Rabbit anti-alpha Tubulin loading control) were incubated overnight at 4°C at 20 μg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rat IgG H&L (IRDye® 800CW) \textbf{(ab253031)} and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed \textbf{ab216777} secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

HC image of MRP4 staining in Human lung adenocarcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab15602, 10μg/ml, for 15 mins at room temperature. A Goat anti-Rat biotinylated secondary antibody \textbf{(ab253031)} was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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- We investigate all quality concerns to ensure our products perform to the highest standards

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