

Product datasheet

Anti-M6PR (cation dependent) antibody [EPR7691] ab134153

KO **VALIDATED** Recombinant RabMAb[®]

★★★★☆ 2 Abreviews 3 References 7 Images

Overview

Product name	Anti-M6PR (cation dependent) antibody [EPR7691]
Description	Rabbit monoclonal [EPR7691] to M6PR (cation dependent)
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt, ICC/IF Unsuitable for: IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human M6PR (cation dependent) aa 250 to the C-terminus (C terminal). Database link: P20645
Positive control	WB: HAP1, A549, and Human uterus lysates ICC/IF: HeLa cell lysate Flow Cyt: A549 cells
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](#).

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

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 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.

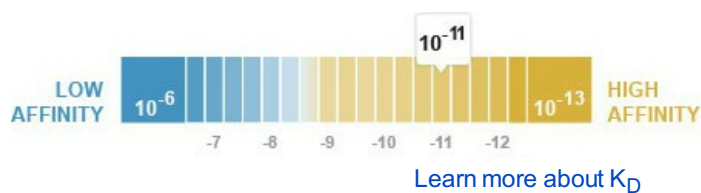
We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Dissociation constant (K_D)	K _D = 6.30 x 10 ⁻¹¹ M



Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7691
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab134153** 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
WB	★★★★☆	1/1000 - 1/10000. Predicted molecular weight: 31 kDa.
Flow Cyt		1/80.

Application	Abreviews	Notes
ICC/IF	★★★★☆	1/50 - 1/100.

Application notes Is unsuitable for IHC-P.

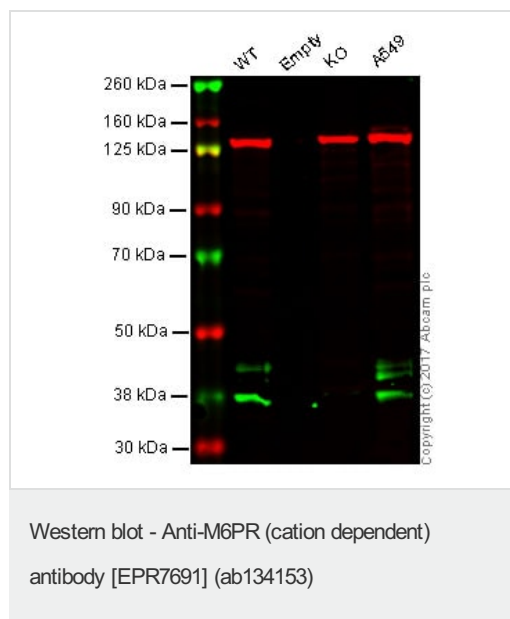
Target

Function Transport of phosphorylated lysosomal enzymes from the Golgi complex and the cell surface to lysosomes. Lysosomal enzymes bearing phosphomannosyl residues bind specifically to mannose-6-phosphate receptors in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic prelysosomal compartment where the low pH mediates the dissociation of the complex.

Domain The extracellular domain is homologous to the repeating units (of approximately 147 AA) of the cation-independent mannose 6-phosphate receptor.

Cellular localization Lysosome membrane.

Images



Lane 1: Wild type HAP1 whole cell lysate (20 µg)

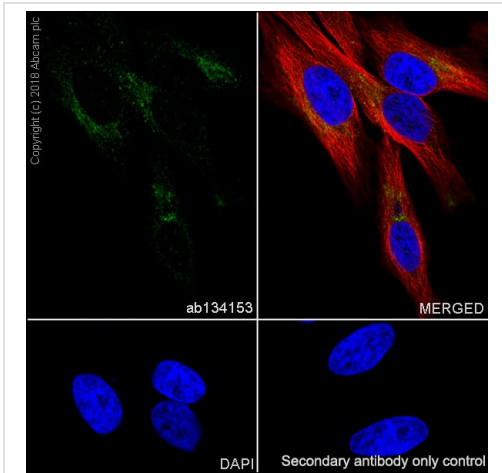
Lane 2: Empty

Lane 3: M6PR knockout HAP1 whole cell lysate (20 µg)

Lane 4: A549 whole cell lysate (20 µg)

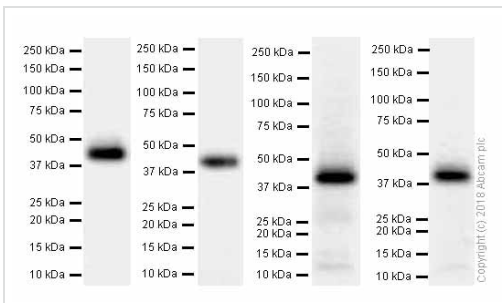
Lanes 1 - 4: Merged signal (red and green). Green - unpurified ab134153 observed at 46 kDa. Red - loading control, [ab18058](#), observed at 130 kDa.

ab134153 was shown to specifically react with M6PR when M6PR knockout samples were used. Wild-type and M6PR knockout samples were subjected to SDS-PAGE. ab134153 and [ab18058](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling M6PR (cation dependent) with Purified ab134153 at 1:100 dilution (8.6 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor®594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor®488, ab150077) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Immunocytochemistry/ Immunofluorescence - Anti-M6PR (cation dependent) antibody [EPR7691] (ab134153)



Western blot - Anti-M6PR (cation dependent) antibody [EPR7691] (ab134153)

All lanes : Anti-M6PR (cation dependent) antibody [EPR7691] (ab134153) at 0.8 µg/ml (purified)

Lane 1 : A549 (Human lung carcinoma epithelial cell) whole cell lysates

Lane 2 : Mouse kidney lysates

Lane 3 : Rat kidney lysates

Lane 4 : Rat spleen lysates

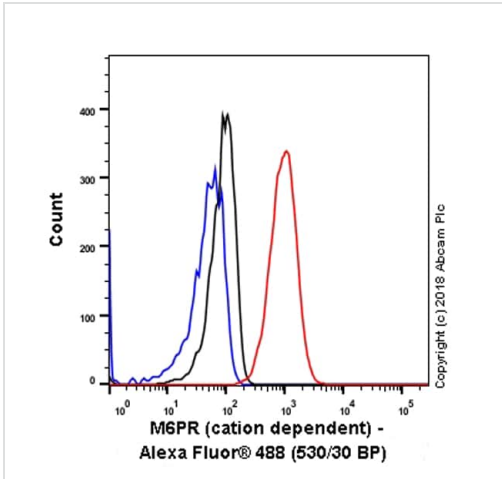
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

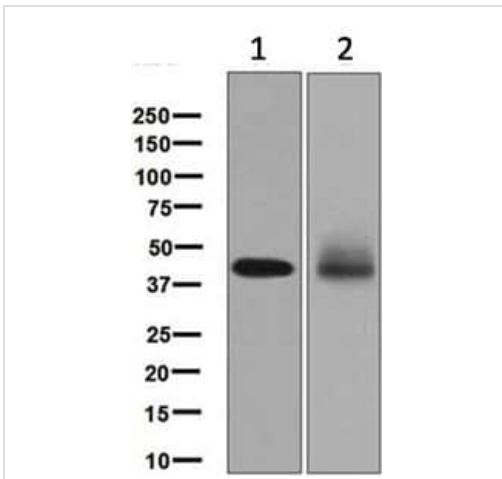
Predicted band size: 31 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Flow Cytometry - Anti-M6PR (cation dependent) antibody [EPR7691] (ab134153)

Flow Cytometry analysis of A549 (Human lung carcinoma epithelial cell) cells labeling M6PR (cation dependent) with purified ab134153 at 1:80 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-M6PR (cation dependent) antibody [EPR7691] (ab134153)

All lanes : Anti-M6PR (cation dependent) antibody [EPR7691] (ab134153) at 1/1000 dilution (Unpurified)

Lane 1 : A549 lysates

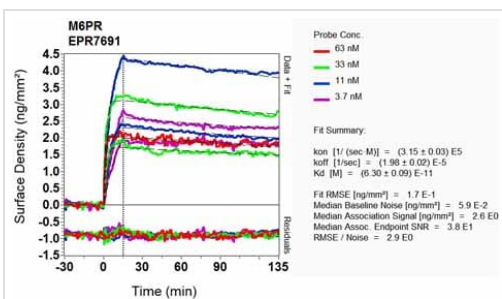
Lane 2 : Human uterus lysates

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 31 kDa



OIR-D Scanning - Anti-M6PR (cation dependent) antibody [EPR7691] (ab134153)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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-M6PR (cation dependent) antibody [EPR7691]
(ab134153)

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

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- 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

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