abcam

Product datasheet

Anti-M6PR (cation independent) antibody [EPR6599] ab124767

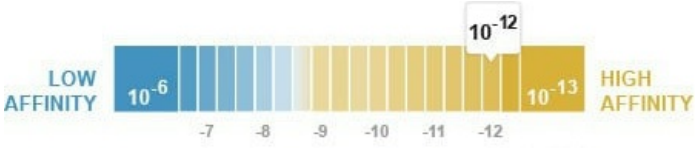
敲除验证 重组 RabMAb

★★★★★ 7 Abreviews 61 References 15 图像

概述

产品名称	Anti-M6PR (cation independent)**抗体**[EPR6599]
描述	**兔单克隆抗体**[EPR6599] to M6PR (cation independent)
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, IHC-P, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	Jurkat, 293T, C6, PC-12, NIH/3T3 and Caco-2 cell lysates; Human papillary carcinoma, thyroid and tonsil tissue; Mouse heart, kidney, colon and spleen tissue; Rat colon tissue . ICC/IF: HAP1 WT and HAP1-IGF2R knockout cells
常规说明	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**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
解离常数 (K_D)	K_D = 3.90 x 10^{-12} M  Learn more about K_D
存储溶液	pH: 7.20

	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR6599
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab124767于以下的经测试应用**

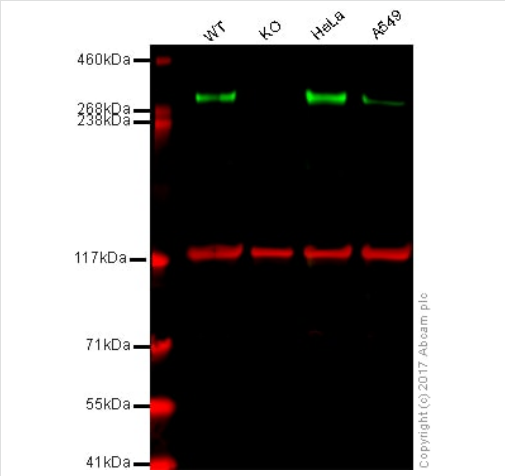
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/100 - 1/500. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (4)	1/50000 - 1/200000. Detects a band of approximately 300 kDa (predicted molecular weight: 274 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Heat up to 98°C, below boiling, and then let cool for 10-20 min. See **IHC antigen retrieval protocols**.
ICC/IF	★★★★★ (3)	Use a concentration of 1 µg/ml.

靶标

功能	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 prelyosomal compartment where the low pH mediates the dissociation of the complex. This receptor also binds IGF2. Acts as a positive regulator of T-cell coactivation, by binding DPP4.
序列相似性	Belongs to the MRL1/IGF2R family. Contains 1 fibronectin type-II domain.
结构域	Contains 15 repeating units of approximately 147 AA harboring four disulfide bonds each. The most highly conserved region within the repeat consists of a stretch of 13 AA that contains cysteines at both ends.
细胞定位	Lysosome membrane. Colocalized with DPP4 in internalized cytoplasmic vesicles adjacent to the cell surface.

图片

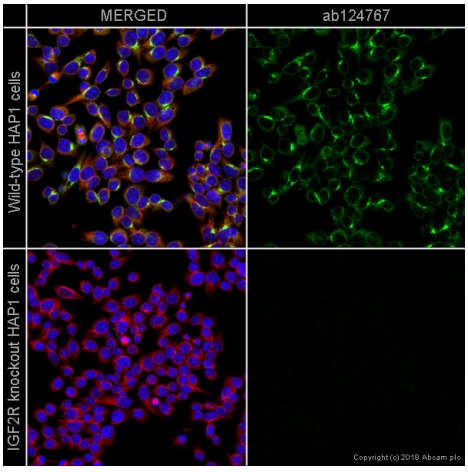


Western blot - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)
Lane 2: M6PR (cation independent) knockout HAP1 whole cell lysate (20 µg)
Lane 3: HeLa whole cell lysate (20 µg)
Lane 4: A549 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab124767 observed at 274 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

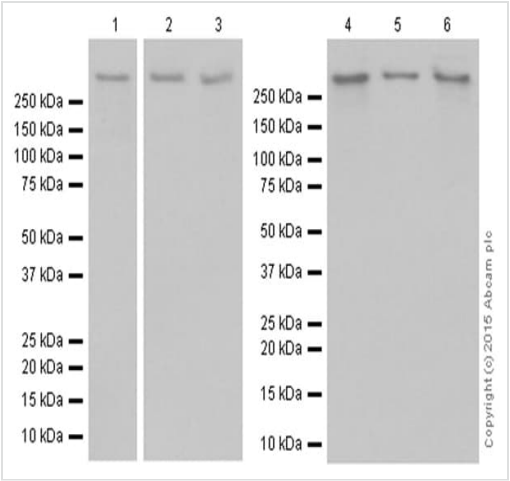
ab124767 was shown to specifically react with M6PR (cation independent) in wild-type HAP1 cells as signal was lost in M6PR (cation independent) knockout cells. Wild-type and M6PR (cation independent) knockout samples were subjected to SDS-PAGE. Ab124767 and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/50000 dilution and 1/20000 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 - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

ab124767 staining M6PR in wild-type HAP1 cells (top panel) and IGF2R knockout HAP1 cells (bottom panel). The cells were fixed with 100% MeOH for 5 min. , permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab124767 at 1µg/ml and **ab195889** (Mouse monoclonal [DM1A] to alpha Tubulin - Microtubule Marker (Alexa Fluor® 594)) at 1/250 dilution (shown in pseudocolour red) overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Western blot - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

All lanes : Anti-M6PR (cation independent) antibody [EPR6599] (ab124767) at 1/50000 dilution (purified)

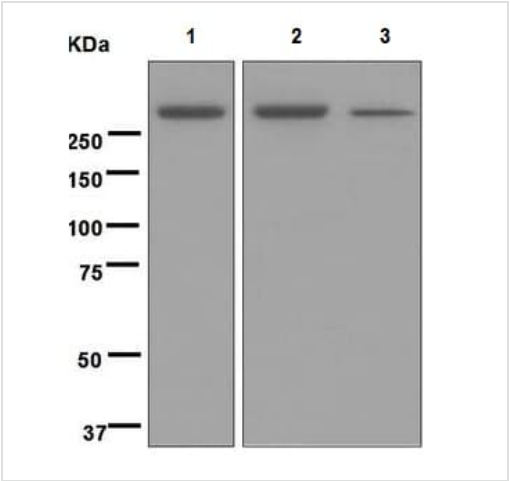
Lane 1 : C6 (rat glioma) whole cell lysate
Lane 2 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysates
Lane 3 : NIH/3T3 (mouse embryo) whole cell lysate
Lane 4 : Mouse heart tissue lysate
Lane 5 : Mouse kidney tissue lysate
Lane 6 : Mouse spleen tissue lysate

Lysates/proteins at 20 µg per lane.

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

Predicted band size: 274 kDa
Observed band size: 300 kDa

Blocking and diluting buffer 5% NFDM/TBST



Western blot - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

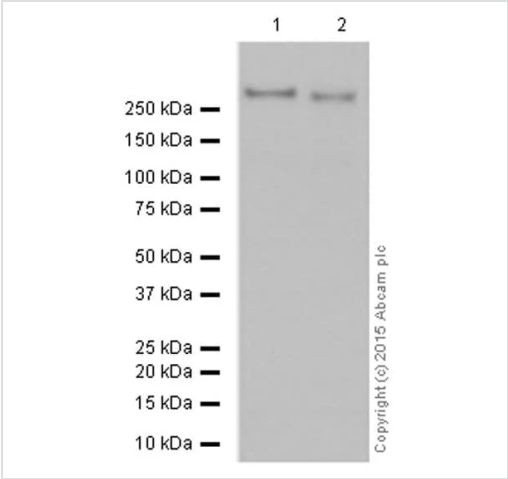
All lanes : Anti-M6PR (cation independent) antibody [EPR6599] (ab124767) at 1/50000 dilution (unpurified)

Lane 1 : Jurkat cell lysate
Lane 2 : 293T cell lysate
Lane 3 : Caco-2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 274 kDa



Western blot - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

All lanes : Anti-M6PR (cation independent) antibody [EPR6599] (ab124767) at 1/200000 dilution (purified)

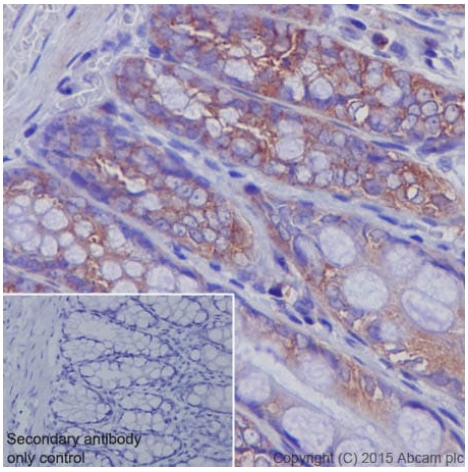
Lane 1 : Jurkat (human acute T cell leukemia) whole cell lysate
Lane 2 : HEK293 (human embryonic kidney) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

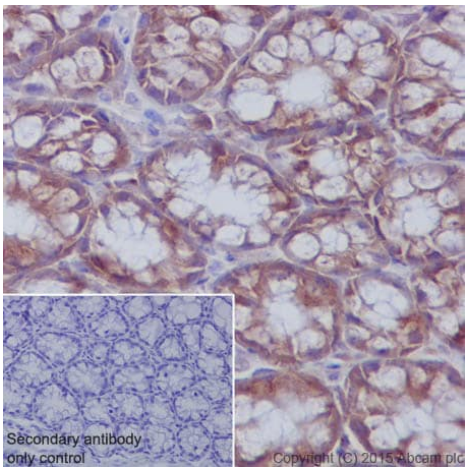
Predicted band size: 274 kDa
Observed band size: 300 kDa

Blocking and diluting buffer 5% NFDM/TBST



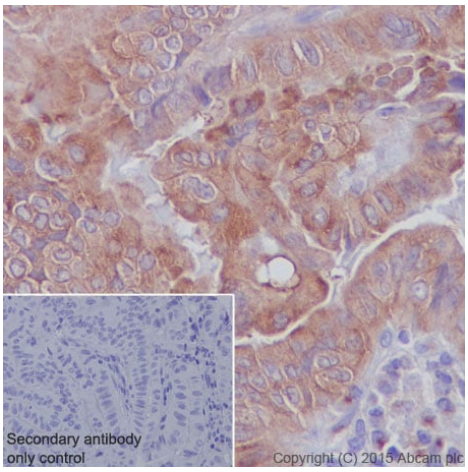
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Immunohistochemical staining of paraffin embedded rat colon tissue section labelling M6PR with purified ab124767 at dilution of 1/500. The secondary antibody used was **ab97051** Goat Anti-Rabbit IgG H&L (HRP), at a dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



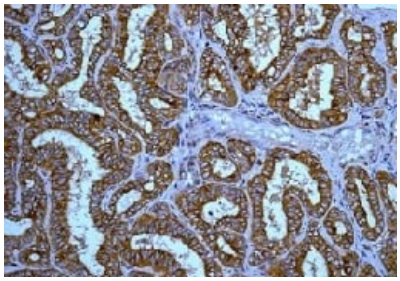
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Immunohistochemical staining of paraffin embedded mouse colon tissue section labelling M6PR with purified ab124767 at dilution of 1/500. The secondary antibody used was **ab97051** Goat Anti-Rabbit IgG H&L (HRP), at a dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

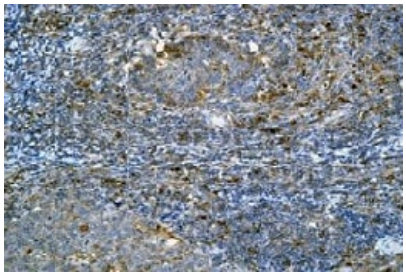
Immunohistochemical staining of paraffin embedded human thyroid carcinoma tissue section labelling M6PR with purified ab124767 at dilution of 1/500. The secondary antibody used was **ab97051** Goat Anti-Rabbit IgG H&L (HRP), at a dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Immunohistochemical analysis of formalin fixed, paraffin embedded Human papillary carcinoma tissue section labelling Mannose 6 Phosphate Receptor (Cation independent) with unpurified ab124767 at dilution of 1/250.

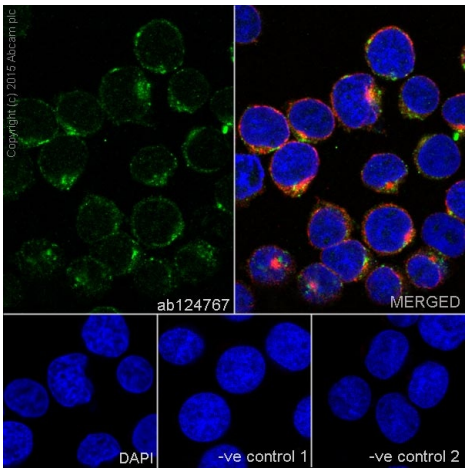
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Immunohistochemical analysis of formalin fixed, paraffin embedded Human tonsil tissue section labelling Mannose 6 Phosphate Receptor (Cation independent) with unpurified ab124767 at dilution of 1/250.

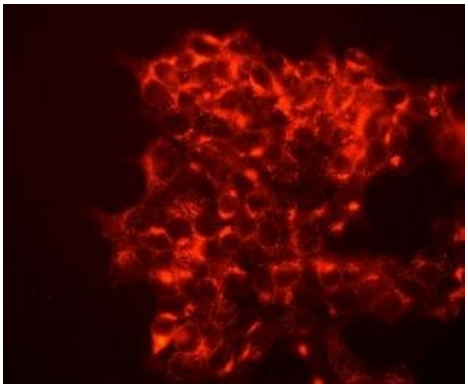
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

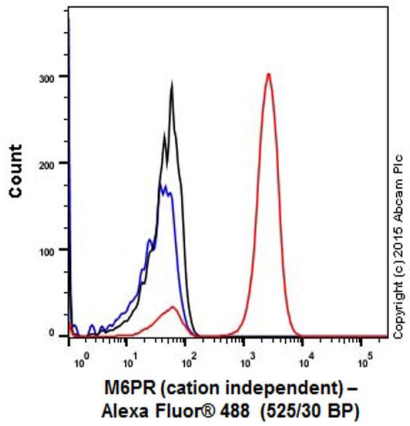
Immunocytochemistry/Immunofluorescence analysis of Jurkat (human acute T cell leukemia) cells labelling M6PR with purified ab124767 at 1/100. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. The cells were co-stained with **ab7291**, a mouse anti-tubulin antibody (1/1000) using **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) as the secondary. Nuclei couterstained with DAPI (blue).

For negative control 1, rabbit primary antibody was used, followed by anti-mouse secondary antibody (**ab150120**). For negative control 2, mouse primary antibody (**ab7291**) was used followed by anti-rabbit secondary antibody (**ab150077**).



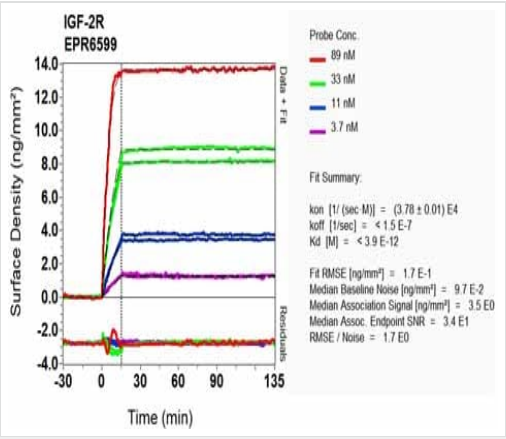
Immunocytochemistry/ Immunofluorescence - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Immunocytochemistry/immunofluorescence analysis of 293T cells labelling Mannose 6 Phosphate Receptor (Cation independent) with unpurified ab124767 at dilution of 1/100.



Flow Cytometry (Intracellular) - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Intracellular Flow Cytometry analysis of Jurkat (human acute T cell leukemia) cells labelling M6PR with purified ab124767 at 1/150 (red). Cells were fixed with 4% paraformaldehyde. Alexa Fluorr® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

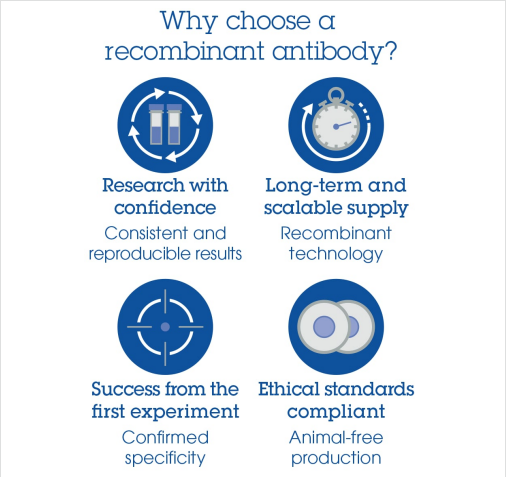


OI-RD Scanning - Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-M6PR (cation independent) antibody [EPR6599] (ab124767)

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