abcam

Product datasheet

Anti-M6PR (cation independent) antibody ab32815

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Overview

Product name	Anti-M6PR (cation independent) antibody
Description	Rabbit polyclonal to M6PR (cation independent)
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, IHC-P
Species reactivity	**Reacts with:** Mouse, Cow, Human, Non human primates
Immunogen	Full length native protein (purified) corresponding to Cow M6PR (cation independent). Full length native protein purified from adult bovine liver tissue.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: Whole serum
Purity	Whole antiserum
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab32815** in the following tested applications.

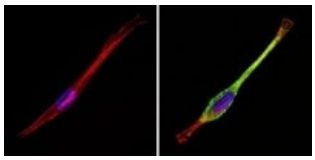
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★	1/50 - 1/500.
IHC-P		1/1000.

Target

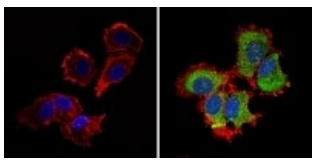
Function	Transport of phosphorylated lysosomal enzymes from the Golgi complex and the cell surface to lysosomes. Lysosomal enzymes bearing phosphomannosyl residues bind specifically to mannose-6-phosphate receptors in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic 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.
Sequence similarities	Belongs to the MRL1/IGF2R family. Contains 1 fibronectin type-II domain.
Domain	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.
Cellular localization	Lysosome membrane. Colocalized with DPP4 in internalized cytoplasmic vesicles adjacent to the cell surface.

Images



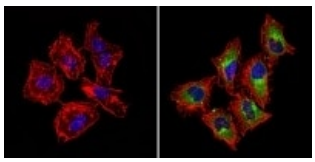
Immunocytochemistry/ Immunofluorescence - Anti-M6PR (cation independent) antibody (ab32815)

Immunofluorescent analysis of Mannose 6 Phosphate Receptor (Cation independent) (green) showing staining in the cytoplasm of NIH-3T3 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Mannose 6 Phosphate Receptor (Cation independent) antibody (ab32815) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.



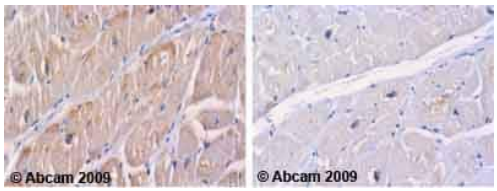
Immunocytochemistry/ Immunofluorescence - Anti-M6PR (cation independent) antibody (ab32815)

Immunofluorescent analysis of Mannose 6 Phosphate Receptor (Cation independent)(green) showing staining in the cytoplasm and nucleus of MCF-7 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Mannose 6 Phosphate Receptor (Cation independent) antibody (ab32815) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.



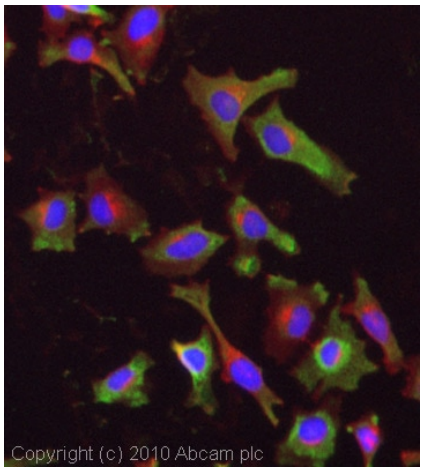
Immunocytochemistry/ Immunofluorescence - Anti-M6PR (cation independent) antibody (ab32815)

Immunofluorescent analysis of Mannose 6 Phosphate Receptor (Cation independent) (green) showing staining in the cytoplasm of Hela cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Mannose 6 Phosphate Receptor (Cation independent) antibody (ab32815) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M6PR (cation independent) antibody (ab32815)

Ab32815 staining human normal left ventricle of heart. Staining is localized to lysosome and lysosomal membrane.
Left panel: with primary antibody duluted at 1:1000. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer citrate pH 6.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplifi



Immunocytochemistry/ Immunofluorescence - Anti-M6PR (cation independent) antibody (ab32815)

ICC/IF image of ab32815 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab32815, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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