# abcam

# Product datasheet

# Alexa Fluor® 647 Anti-M6PR (cation independent) antibody [EPR6599] - Lysosome Membrane Marker ab198324





## 3 Images

#### Overview

**Product name** Alexa Fluor® 647 Anti-M6PR (cation independent) antibody [EPR6599] - Lysosome Membrane

Marker

**Description** Alexa Fluor® 647 Rabbit monoclonal [EPR6599] to M6PR (cation independent) - Lysosome

Membrane Marker

**Host species** Rabbit

Conjugation Alexa Fluor® 647. Ex: 652nm. Em: 668nm

**Tested applications** Suitable for: ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. **Immunogen** 

ICC/IF: Caco-2 cells, HAP1-WT and HAP1-IGF2R knockout cells. Positive control

**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**.

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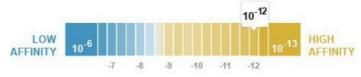
## **Properties**

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. Store In the Dark.

**Dissociation constant (K<sub>D</sub>)**  $K_D = 3.90 \times 10^{-12} M$ 



### Learn more about K<sub>D</sub>

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

ClonalityMonoclonalClone numberEPR6599

**Isotype** IgG

#### **Applications**

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab198324 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		1/100. This product gave a positive signal in cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min)

#### **Target**

Function Transport of phosphorylated lysosomal enzymes from the Golgi complex and the cell surface to

 $\label{lysosomes} \mbox{ lysosomes. Lysosomal enzymes bearing phosphomannosyl residues bind specifically to}$ 

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.

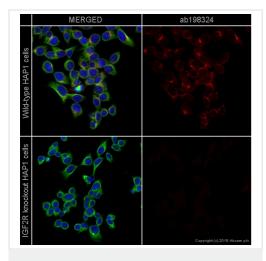
**Domain** 

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** 

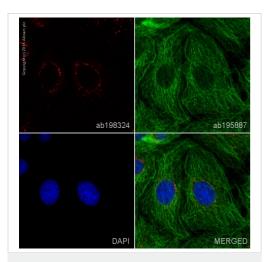
Lysosome membrane. Colocalized with DPP4 in internalized cytoplasmic vesicles adjacent to the cell surface.

#### **Images**



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-M6PR (cation independent) antibody [EPR6599] - Lysosome Membrane Marker (ab198324) ab198324 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 ab198324 at 5µg/ml and ab195887 (Mouse monoclonal [DM1A] to alpha Tubulin - Microtubule Marker (Alexa Fluor® 488)) at 1/250 dilution (shown in green) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

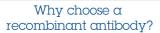
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-M6PR (cation independent) antibody [EPR6599] - Lysosome Membrane Marker (ab198324) ab198324 staining M6PR (cation independent) in CaCo2 cells. The cells were fixed with 100% methanol (5min), 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 overnight at +4°C with ab198324 at 1/100 dilution (shown in red) and <a href="mailto:ab195887">ab195887</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

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

This product also gave a positive signal under the same testing conditions in CaCo2 cells fixed with 4% formaldehyde (10 min).





Research with confidence Consistent and reproducible results







Success from the first experiment Confirmed specificity

Animal-free production

Alexa Fluor® 647 Anti-M6PR (cation independent) antibody [EPR6599] - Lysosome Membrane Marker (ab198324)

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

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