


## Product datasheet

# Alexa Fluor® 488 Anti-M6PR (cation independent) antibody [2G11] ab205812

**KO** VALIDATED

1 References 2 Images

### Overview

<b>Product name</b>	Alexa Fluor® 488 Anti-M6PR (cation independent) antibody [2G11]
<b>Description</b>	Alexa Fluor® 488 Mouse monoclonal [2G11] to M6PR (cation independent)
<b>Host species</b>	Mouse
<b>Conjugation</b>	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat, Cow, Non human primates, African green monkey 
<b>Immunogen</b>	Full length native protein (purified) corresponding to Cow M6PR (cation independent).
<b>Epitope</b>	This antibody is shown to recognize an epitope in the extracellular domain of Mannose 6 Phosphate Receptor.
<b>Positive control</b>	ICC/IF: HeLa cells, HAP1-WT and HAP1-IGF2R knockout cells.
<b>General notes</b>	<p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: (i) in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a>.</p> <p>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.</p>

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

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	2G11
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab205812 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

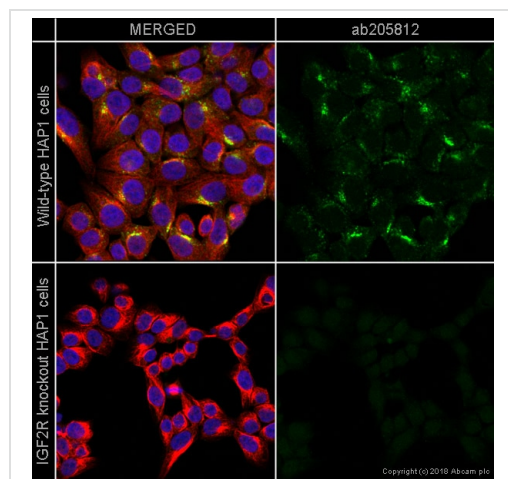
Application	Abreviews	Notes
ICC/IF		1/100. This product gave a positive signal in cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min)

## Target

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<b>Function</b>	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. This receptor also binds IGF2. Acts as a positive regulator of T-cell coactivation, by binding DPP4.
<b>Sequence similarities</b>	Belongs to the MRL1/IGF2R family. Contains 1 fibronectin type-II domain.
<b>Domain</b>	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.
<b>Cellular localization</b>	Lysosome membrane. Colocalized with DPP4 in internalized cytoplasmic vesicles adjacent to the cell surface.

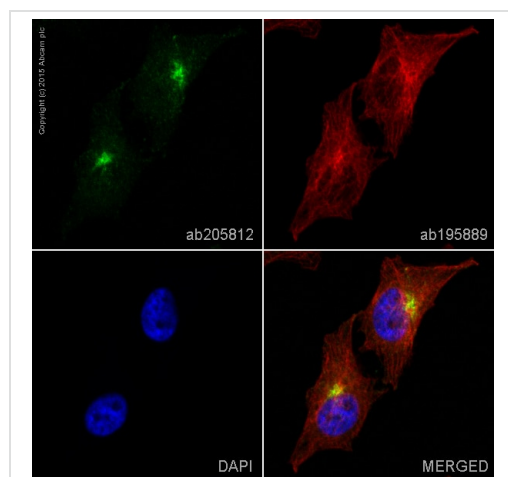
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Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-M6PR (cation independent) antibody [2G11] (ab205812)

ab205812 staining M6PR in wild-type HAP1 cells (top panel) and IGF2R knockout HAP1 cells (bottom panel). The cells were fixed with 4% PFA for 10 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 ab205812 at 5µg/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. Nuclear DNA was labelled in blue with DAPI.

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



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-M6PR (cation independent) antibody [2G11] (ab205812)

ab205812 staining M6PR (cation independent) in HeLa cells. The cells were fixed with 4% formaldehyde (10 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 overnight at +4°C with ab205812 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). 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 HeLa cells fixed with 100% methanol (5min).

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

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