

Product datasheet

Anti-IMPDH2 antibody [EPR8365(B)] α b129165

Recombinant RabMAb

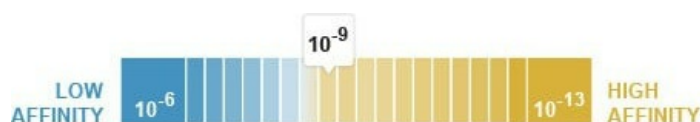
[5 References](#) [7 Images](#)

Overview

Product name	Anti-IMPDH2 antibody [EPR8365(B)]
Description	Rabbit monoclonal [EPR8365(B)] to IMPDH2
Host species	Rabbit
Specificity	The immunogen used to raise this antibody shares 86% homology with Human IMPDH1. Cross-reactivity with this protein has not been confirmed experimentally.
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human IMPDH2 aa 500-600 (C terminal). The exact sequence is proprietary.
Positive control	WB: HeLa, K-562, MCF7 whole cell lysate, Rat and Mouse spleen lysate, DDDK tagged human full length IMPDH2 recombinant protein; IHC-P: Human colon and ovarian cancer tissue; ICC/IF: HeLa cells; Flow Cyt (Intra): K-562 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 2.24 x 10 ⁻⁹ M



[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8365(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab129165 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

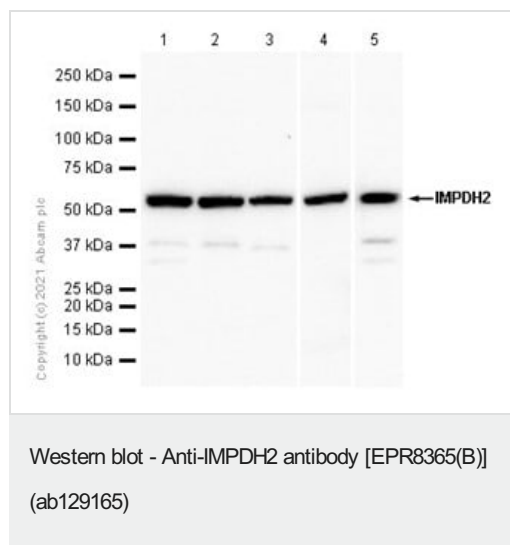
Application	Abreviews	Notes
Flow Cyt (Intra)		1/1000 - 1/10000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/250 - 1/500.

Application notes Is unsuitable for IP.

Target

Function	Rate limiting enzyme in the de novo synthesis of guanine nucleotides and therefore is involved in the regulation of cell growth. It may also have a role in the development of malignancy and the growth progression of some tumors.
Tissue specificity	IMP type I is the main species in normal leukocytes and type II predominates over type I in the tumor.
Pathway	Purine metabolism; XMP biosynthesis via de novo pathway; XMP from IMP: step 1/1.
Sequence similarities	Belongs to the IMPDH/GMPR family. Contains 2 CBS domains.
Post-translational modifications	The N-terminus is blocked.

Images



All lanes : Anti-IMPDH2 antibody [EPR8365(B)] (ab129165) at 1/10000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 3 : MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate

Lane 4 : Rat spleen lysate

Lane 5 : Mouse spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

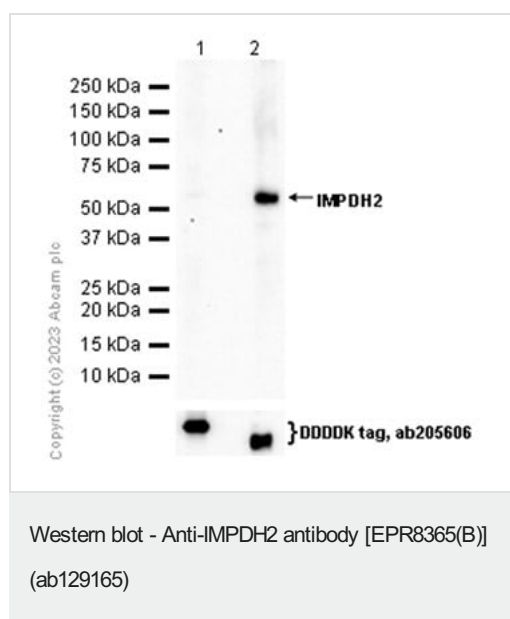
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Exposure time: 60 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST



All lanes : Anti-IMPDH2 antibody [EPR8365(B)] (ab129165) at 1/1000 dilution

Lane 1 : DDDK tagged human full length IMPDH1 recombinant protein

Lane 2 : DDDK tagged human full length IMPDH2 recombinant protein

Lysates/proteins at 10 µg per lane.

Secondary

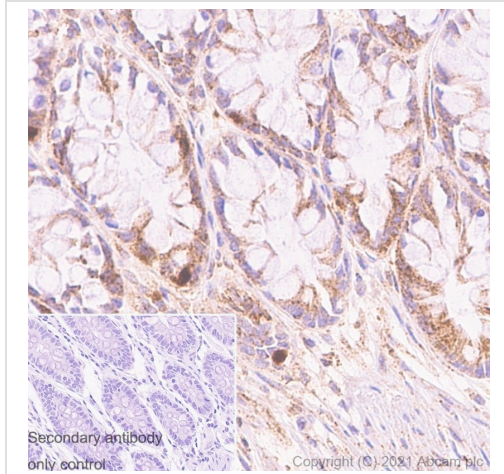
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Exposure time: 140 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST

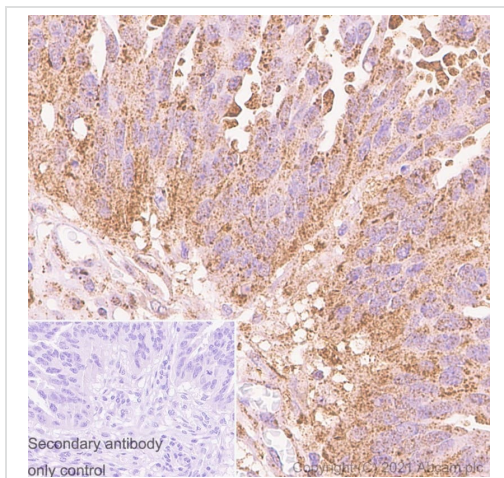


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IMPDH2 antibody [EPR8365(B)] (ab129165)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling IMPDH2 with ab129165 at 1/4000 for 30 mins at room temperature. A Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody.

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. Negative control using only secondary antibody. Counterstained with hematoxylin.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

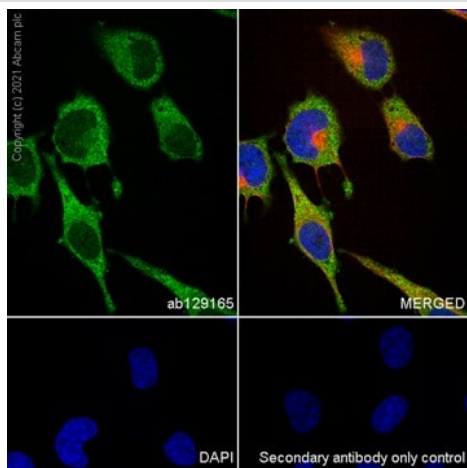


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IMPDH2 antibody [EPR8365(B)] (ab129165)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human ovarian cancer tissue labelling IMPDH2 with ab129165 at 1/4000 for 30 mins at room temperature. A Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody.

Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. Negative control using only secondary antibody. Counterstained with hematoxylin.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

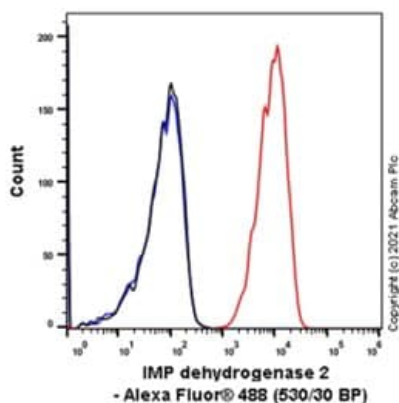


Immunocytochemistry/ Immunofluorescence - Anti-IMP2H2 antibody [EPR8365(B)] (ab129165)

Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labelling IMP2H2 (Green) with ab129165 at 1/1000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150081**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG H&L, was used as the secondary antibody at a 1/1000. Tubulin (Red) was stained with **ab195889**, an Alexa Fluor® 594-conjugated anti-alpha tubulin antibody, at a 1/200 dilution. DAPI (Blue) was used as the nuclear counterstain. Negative control using only secondary antibody.

Confocal image showing cytoplasmic and weak nuclear staining in HeLa cells.

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



Flow Cytometry (Intracellular) - Anti-IMP2H2 antibody [EPR8365(B)] (ab129165)

Intracellular Flow Cytometry analysis of K-562 (human chronic myelogenous leukemia lymphoblast) cells labeling IMP2H2 with ab129165 at 1/20 dilution (Red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% Methanol. Rabbit monoclonal - Alexa Fluor® 488 (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

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-IMPDH2 antibody [EPR8365(B)] (ab129165)

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