

## Product datasheet

# Anti-PHD1/prolyl hydroxylase antibody [EPR2746] ab113077

Recombinant RabMAb

★★★★☆ [2 Abreviews](#) [5 References](#) [10 Images](#)

### Overview

<b>Product name</b>	Anti-PHD1/prolyl hydroxylase antibody [EPR2746]
<b>Description</b>	Rabbit monoclonal [EPR2746] to PHD1/prolyl hydroxylase
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: A549, HeLa and MCF-7 cell lysates, Human fetal heart, Mouse brain, Mouse heart, Rat brain, Rat heart tissue lysates IHC-P: Mouse testis, Rat spleen, Human breast carcinoma and Human lung carcinoma tissue ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR2746

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab113077 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)		1/30.
WB	★★★★★ (2)	1/1000 - 1/10000. Detects a band of approximately 44 kDa (predicted molecular weight: 44 kDa).
IHC-P		1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> . <b>For unpurified use at 1/100 - 1/250.</b>
ICC/IF		1/50 - 1/100.

## Target

### Function

Catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. Hydroxylates HIF-1 alpha at 'Pro-402' and 'Pro-564', and HIF-2 alpha. Functions as a cellular oxygen sensor and, under normoxic conditions, targets HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. May play a role in cell growth regulation. Isoform p40 and isoform p43 exhibit the same level of activity.

### Tissue specificity

Expressed abundantly in all tissues with highest expression in testis. Expressed in hormone responsive tissues, including normal and cancerous mammary, ovarian and prostate epithelium.

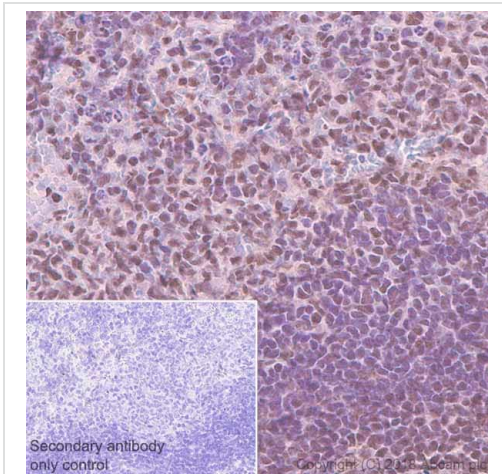
### Sequence similarities

Contains 1 Fe2OG dioxygenase domain.

### Cellular localization

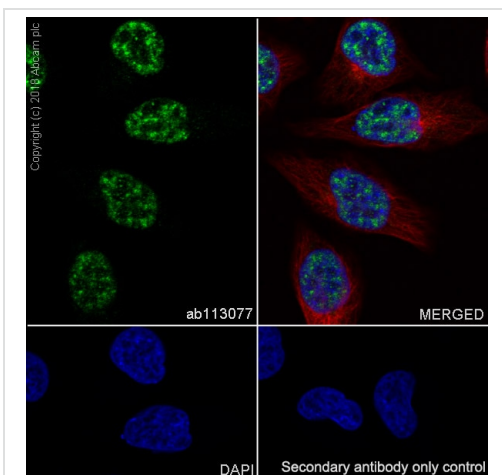
Cytoplasm. Nucleus.

## Images



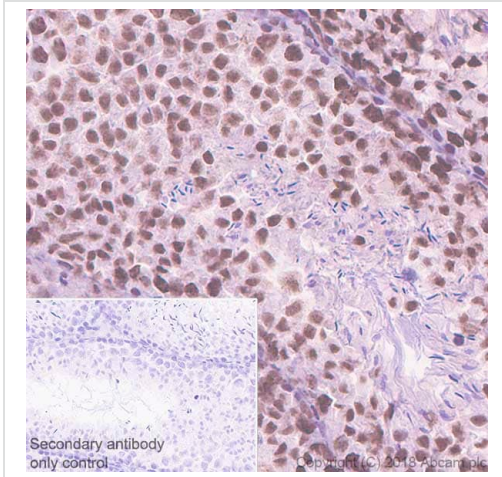
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat spleen tissue sections labeling PHD1/prolyl hydroxylase with Purified ab113077 at 1:50 dilution (5.14 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)



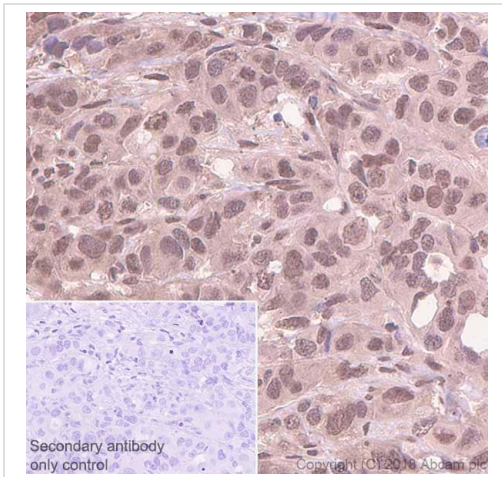
Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling PHD1/prolyl hydroxylase with purified ab113077 at 1/50 dilution (5 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL) was used as the secondary antibody only control.

Immunocytochemistry/ Immunofluorescence - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)



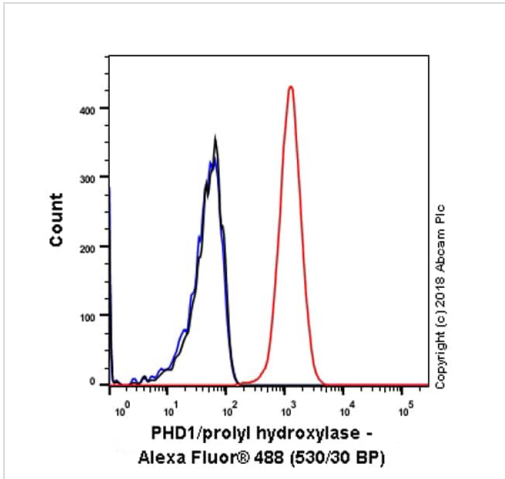
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse testis tissue sections labeling PHD1/prolyl hydroxylase with Purified ab113077 at 1:50 dilution (5.14 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



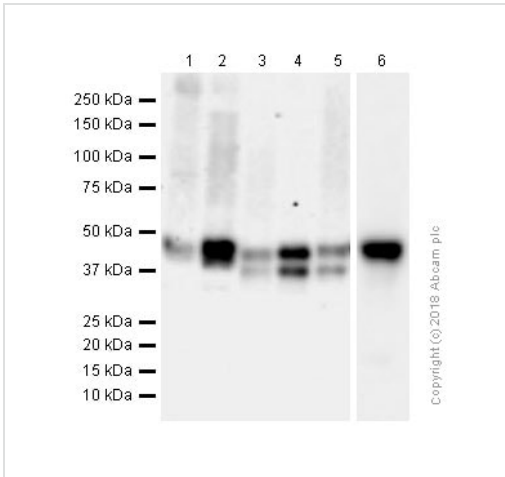
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast cancer tissue sections labeling PHD1/prolyl hydroxylase with Purified ab113077 at 1:50 dilution (5.14 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PHD1/prolyl hydroxylase with Purified ab113077 at 1/30 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)

**All lanes :** Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077) at 1/1000 dilution (Purified)

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** Human fetal heart lysates

**Lane 3 :** Mouse brain lysates

**Lane 4 :** Mouse heart lysates

**Lane 5 :** Rat brain lysates

**Lane 6 :** Rat heart lysates

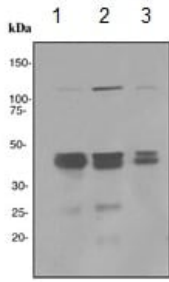
Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 44 kDa

**Observed band size:** 40,43 kDa



Western blot - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)

**All lanes** : Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077) at 1/1000 dilution

**Lane 1** : A549 cell lysates

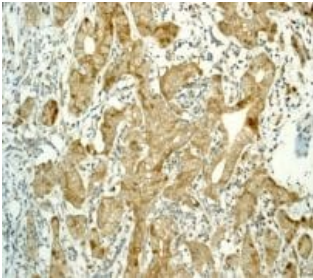
**Lane 2** : HeLa cell lysates

**Lane 3** : MCF-7 cell lysates

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 44 kDa

**This image was generated using the unpurified version of the product.**

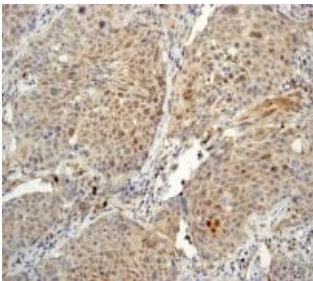


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)

ab113077, at a 1/100 dilution, staining PHD1/prolyl hydroxylase in paraffin-embedded Human breast carcinoma tissue by Immunohistochemistry.

**This image was generated using the unpurified version of the product.**

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [EPR2746] (ab113077)

ab113077, at a 1/100 dilution, staining PHD1/prolyl hydroxylase in paraffin-embedded Human lung carcinoma tissue by Immunohistochemistry.

**This image was generated using the unpurified version of the product.**

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

## 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-PHD1/prolyl hydroxylase antibody [EPR2746]  
(ab113077)

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

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