


Product datasheet

Anti-PHD1/prolyl hydroxylase antibody [EPR2745] ab108980

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [15 References](#) [6 Images](#)

Overview

Product name	Anti-PHD1/prolyl hydroxylase antibody [EPR2745]
Description	Rabbit monoclonal [EPR2745] to PHD1/prolyl hydroxylase
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF Unsuitable for: IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	A549, HeLa, and MCF-7 cell lysates Human ovarian adenocarcinoma tissue Human testis tissue
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <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 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 .

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.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR2745
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab108980 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

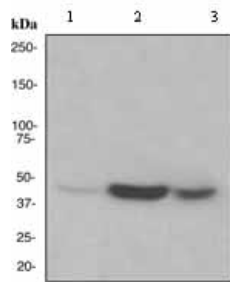
Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★ ★ ★ ★ ★ (1)	1/1000 - 1/10000. Predicted molecular weight: 44 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Perform antigen retrieval
ICC/IF		1/100 - 1/250.

Application notes Is unsuitable for IP.

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



Western blot - Anti-PHD1/prolyl hydroxylase antibody [EPR2745] (ab108980)

All lanes : Anti-PHD1/prolyl hydroxylase antibody [EPR2745] (ab108980) at 1/1000 dilution

Lane 1 : A549 cell lysate

Lane 2 : HeLa cell lysate

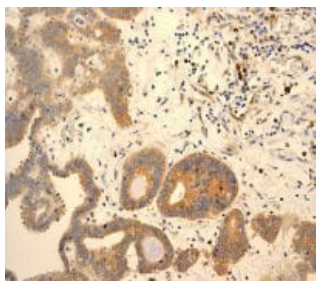
Lane 3 : MCF-7 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Standard HRP labelled goat anti-rabbit at 1/2000 dilution

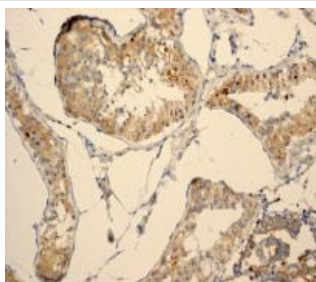
Predicted band size: 44 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [EPR2745] (ab108980)

Immunohistochemical analysis of paraffin-embedded Human ovarian adenocarcinoma tissue using ab108980

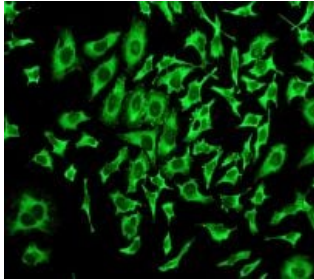
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [EPR2745] (ab108980)

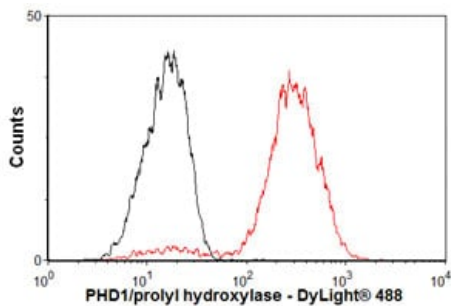
Immunohistochemical analysis of paraffin-embedded Human testis tissue using ab108980

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunofluorescent staining of HeLa cells using ab108980

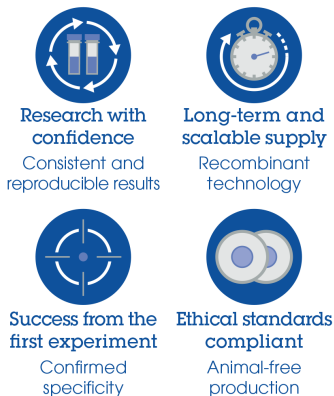
Immunocytochemistry/ Immunofluorescence - Anti-PHD1/prolyl hydroxylase antibody [EPR2745] (ab108980)



Flow Cytometry (Intracellular) - Anti-PHD1/prolyl hydroxylase antibody [EPR2745] (ab108980)

Overlay histogram showing HeLa cells stained with ab108980 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab108980, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) ([ab96899](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

Why choose a recombinant antibody?



Anti-PHD1/prolyl hydroxylase antibody [EPR2745] (ab108980)

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

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