

Product datasheet

Anti-PHD1/prolyl hydroxylase antibody [PHD112/G7] ab82884

[1 References](#) [1 Image](#)

Overview

Product name	Anti-PHD1/prolyl hydroxylase antibody [PHD112/G7]
Description	Mouse monoclonal [PHD112/G7] to PHD1/prolyl hydroxylase
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length Human protein
Positive control	Human testis tissue
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.</p>

Properties

Form	Liquid
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Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	PHD112/G7
Isotype	IgM

Applications

Our [Abpromise guarantee](#) covers the use of **ab82884** in the following tested applications.

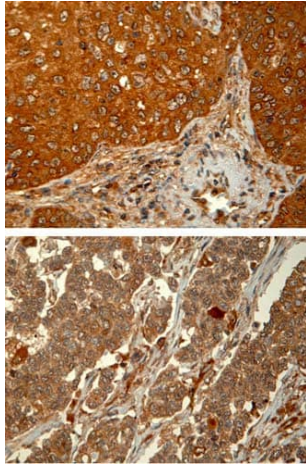
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent dilution. Predicted molecular weight: 47 kDa.
IHC-P		Use at an assay dependent dilution. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

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



Immunohistochemical analysis of formalin-fixed, paraffin-embedded non-small cell type lung tumors with high (top) and low intensities (bottom) for tumor cell expression of PHD1/prolyl hydroxylase.

PHD1/prolyl hydroxylase was stained using ab82884 at 1/50 dilution, and detected using DAB. Slides were counterstained with hematoxylin to visualize the nuclei.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PHD1/prolyl hydroxylase antibody [PHD112/G7] (ab82884)

Image from Andersen S et al., PLoS One. 2011;6(8):e23847. Epub 2011 Aug 22. Fig 3.; doi:10.1371/journal.pone.0023847; August 22, 2011, PLoS ONE 6(8): e23847.

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

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