Product Datasheet

PHD1/prolyl hydroxylase Rabbit mAb

Catalog No: #48716

Package Size: #48716-1 50ul #48716-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

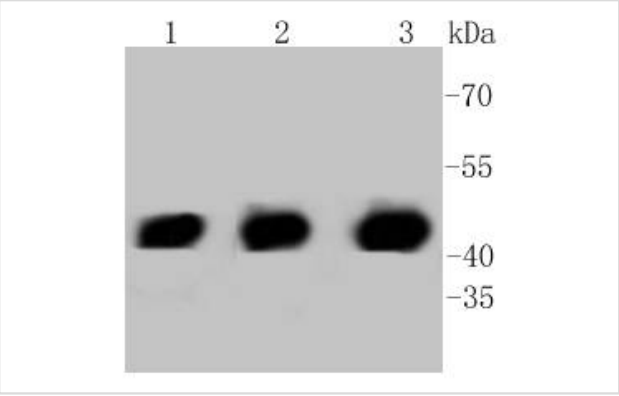
Description

Product Name	PHD1/prolyl hydroxylase Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SP00-48
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	DKFZp434E026 antibody EGL nine (C.elegans) homolog 2 antibody Egl nine homolog 2 (C. elegans) antibody Egl nine homolog 2 antibody EGLN 2 antibody EGLN2 antibody EGLN2_HUMAN antibody EIT 6 antibody EIT6 antibody Estrogen-induced tag 6 antibody HIF P4H 1 antibody HIF PH1 antibody HIF prolyl hydroxylase 1 antibody HIF-PH1 antibody HIF-prolyl hydroxylase 1 antibody HIFPH 1 antibody HIFPH1 antibody HPH 3 antibody HPH-1 antibody HPH-3 antibody HPH3 antibody Hypoxia inducible factor prolyl hydroxylase 1 antibody Hypoxia-inducible factor prolyl hydroxylase 1 antibody P4H1 antibody PHD 1 antibody PhD1 antibody prolyl hydroxylase domain containing protein 1 antibody Prolyl hydroxylase domain-containing protein 1 antibody
Accession No.	Swiss-Prot#:Q96KS0
Uniprot	Q96KS0
GeneID	112398;
Calculated MW	44 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

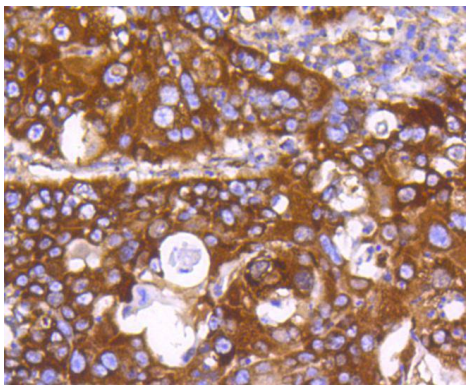
Application Details

WB: 1:1,000-5,000IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

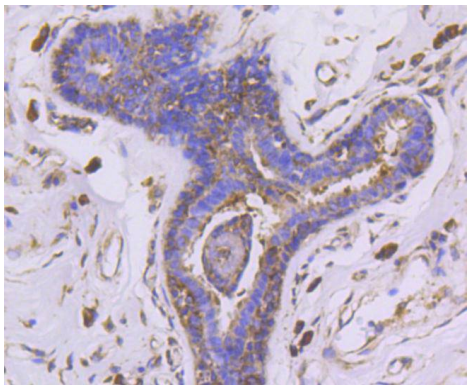
Images



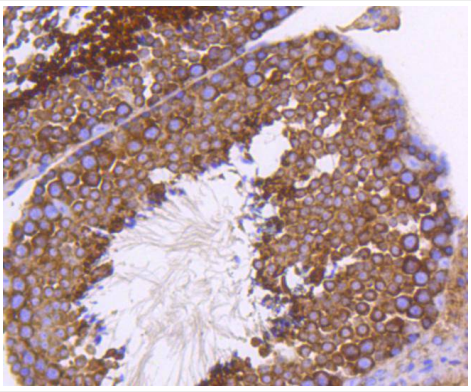
Western blot analysis of PHD1 on different lysates using anti-PHD1 antibody at 1/1,000 dilution. Positive control:
Lane 1: Hela
Lane 2: PC12
Lane 3: NIH/3T3



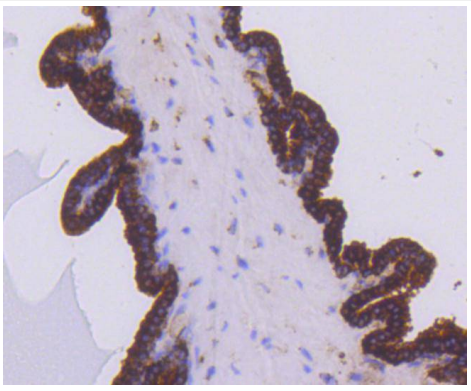
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-PHD1 antibody. Counter stained with hematoxylin.



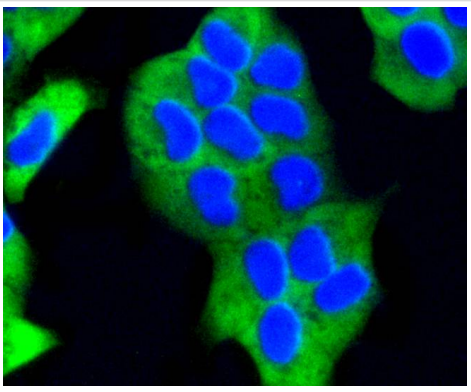
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-PHD1 antibody. Counter stained with hematoxylin.



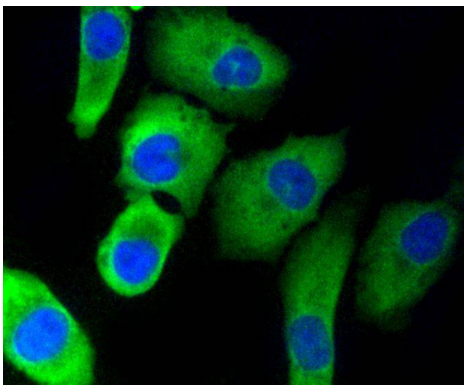
Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-PHD1 antibody. Counter stained with hematoxylin.



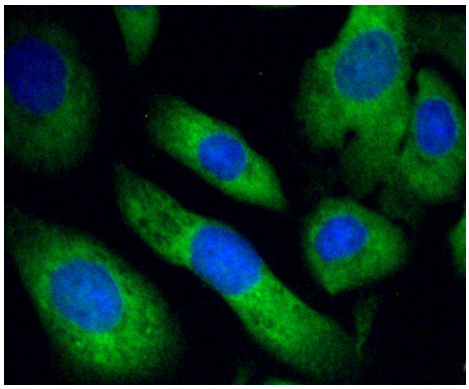
Immunohistochemical analysis of paraffin-embedded mouse prostate tissue using anti-PHD1 antibody. Counter stained with hematoxylin.



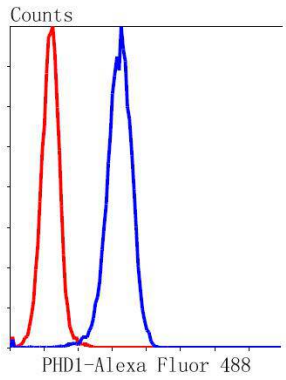
ICC staining PHD1 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining PHD1 in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining PHD1 in SKOV-3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with PHD1 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

Prolyl hydroxylase domain proteins HIF PHD1, HIF PHD2 and HIF PHD3 (known as PHD1, PHD2 and PHD3 in rodents, respectively) can hydroxylate HIF-α subunits. Hypoxia-inducible factor (HIF) is a transcriptional regulator important in several aspects of oxygen homeostasis. The prolyl hydroxylases catalyze the posttranslational formation of 4-hydroxyproline in HIF-α proteins. HIF PHD1, which is widely expressed, with highest levels of expression in testis, functions as a cellular oxygen sensor and is important in cell growth regulation. HIF PHD1 can localize to the nucleus or the cytoplasm and is also detected in hormone responsive tissues, such as normal and cancerous mammary, ovarian and prostate epithelium. HIF PHD1 is encoded by EGLN2, which maps to chromosome 19q13.3. HIF PHD2 is regarded as the main cellular oxygen sensor, as RNA interference against HIF PHD2, but not HIF PHD1 or HIF PHD3, is enough to stabilize HIF-1α in normoxia. HIF PHD2, a direct HIF target gene, is expressed mainly in skeletal muscle, heart, kidney and brain. HIF PHD3 may play a role in the regulation of cell growth in muscle cells and in apoptosis in neuronal tissue. HIF PHD3 is widely expressed, although the highest levels can be detected in placenta and he

References

Note: This product is for in vitro research use only