

Product Datasheet

PHD1 Antibody

Catalog No: CY5072

Reactivity: Human Mouse Rat

Isotype: Rabbit IgG

Applications: WB IHC ICC/IF FC



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Information

UniProt ID: Q96KS0

All Names: Estrogen-induced tag 6; HPH-3; Hypoxia-inducible factor prolyl hydroxylase 1; Prolyl hydroxylase domain-containing protein 1

Form: Liquid

Storage instructions: Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Storage buffer: pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Purity: Affinity-chromatography

Immunogen: A synthesized peptide

Molecular Wt.: 44 kDa

Application

WB: 1:500~1:2000

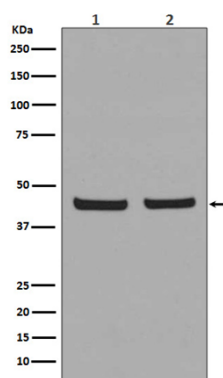
IHC: 1:50~1:200

ICC/IF: 1:50~1:200

FC: 1:50

Background

Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) α proteins. Hydroxylates a specific proline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C-terminal, CODD) of HIF1A. Also hydroxylates HIF2A. Has a preference for the CODD site for both HIF1A and HIF2A. Hydroxylated HIFs are then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Under hypoxic conditions, the hydroxylation reaction is attenuated allowing HIFs to escape degradation resulting in their translocation to the nucleus, heterodimerization with HIF1B, and increased expression of hypoxia-inducible genes. EGLN2 is involved in regulating hypoxia tolerance and apoptosis in cardiac and skeletal muscle.



Western blot analysis of PHD1 in (1)HeLa cell lysate;(2)A549 cell lysate.

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