

Recombinant**DGRmAb®****PHD3 (DGR16500) Rabbit mAb (PBS Only)****db11933-PBS****Package : 100µg****Product Name :** PHD3 (DGR16500) Rabbit mAb (PBS Only)**Cat.No.:** db11933-PBS**Synonyms :** PHD3; HIFPH3; HIFP4H3**Application :** WB, ICC/IF, IP**Reactivity :** Human,Mouse,Rat**Host species :** Rabbit**Background**

Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha 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. Hydroxylation on the NODD site by EGLN3 appears to require prior hydroxylation on the CODD site. 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.

Immunogen

Recombinant protein of human PHD3

Gene ID

112399

Swiss Prot

Q9H6Z9

Synonyms

PHD3; HIFPH3; HIFP4H3

Reactivity

Human,Mouse,Rat

Application

WB, ICC/IF, IP

Calculated MW

27 kDa

Observed MW

27 kDa

Host species

Rabbit

Clonality

Monoclonal

Clonality No.

DGR16500

Isotype

IgG

Purity	Affinity Purification
Conjugation	Un-conjugated
Concentration	1 mg/mL
Formulation	PBS Only
Storage Stability	Store at -20°C. Recommended to aliquot into single-use vials. Supplied in 1X PBS (pH 7.4). BSA and Azide Free. Stable for 12 months from date of receipt.

Western blot analysis of extracts from HeLa cells and Rat spleen tissue using [db11933](#) at 1:1000.

