

Recombinant

DGRmAb®

## PHD3 (DGR16500) Rabbit mAb

db11933

Package : 10µL 20µL 50µL 100µL

**Product Name** : PHD3 (DGR16500) Rabbit mAb**Cat.No.:** db11933**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

**Recommended dilution**

WB: 1:1000

ICC/IF: 1:100-1:200

IP: 1:50-1:100

**Calculated MW**

27 kDa

**Observed MW**

27 kDa

**Host species**

Rabbit

**Clonality**

Monoclonal

Clonality No.	DGR16500
Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. 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.