Recombinant DGRmAb®

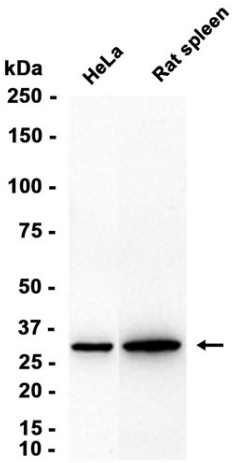
# PHD3 (DGR16500) Rabbit mAb

**db11933** **Package : 10μL 20μL 50μL 100μL**

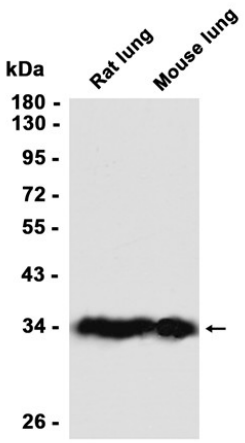
**Product Name :** PHD3 (DGR16500) Rabbit mAb
**Cat.No.:** db11933
**Synonyms :** PHD3; HIFPH3; HIFP4H3
**Application :** WB, ICC/IF, IP
**Reactivity :** Human,Mouse,Rat
**Host species :** Rabbit

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|---|---|
| **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 hypoxy-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<br>ICC/IF: 1:100-1:200<br>IP: 1:50-1:100 |
| **Calculated MW** | 27 kDa |
| **Observed MW** | 27 kDa |
| **Host species** | Rabbit |
| **Clonality** | Monoclonal |

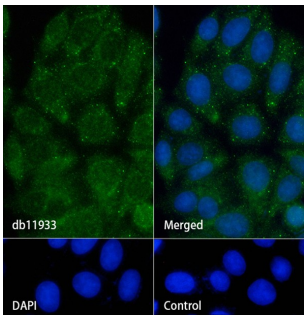
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|---|---|
| **Clonality No.** | DGR16500 |
| **Isotype** | IgG |
| **Purity** | Affinity Purification |
| **Conjugation** | Un-conjugated |
| **Storage Stability** | Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01%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




Western blot analysis of extracts from Rat lung, Mouse lung tissues using db11933 at 1:1000.




Immunofluorescence analysis of HepG2 cells labelling PHD3 with db11933.

The cells were fixed with cold 100% methanol (10min, 4℃) and blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween 20 for 1h. The cells were then incubate with db11933 (1:100) at room temprature for 1h, followed by a further incubation at room temperature for 45min with Goat Anti Rabbit IgG (H+L)-AF488 (db10005, shown in green). Nuclear DNA was labeled in blue with DAPI.

Control: Secondary antibody only.