### For Research Use Only

# PHD2/EGLN1 Polyclonal antibody

Catalog Number: 20368-1-AP

2 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 20368-1-AP NM\_022051
Size: GeneID (NCBI): 54583
Source: UNIPROT ID: Rabbit Q9GZT9

egl nine homolog 1 (C. elegans)

Calculated MW: 46 kDa Observed MW: 46 kDa, 36 kDa

Full Name:

Purification Method: Antigen affinity purification

Recommended Dilutions: WB 1:500-1:1000 IHC 1:100-1:400 IF 1:10-1:100

**Applications** 

Tested Applications: IF/ICC, IHC, WB, ELISA Cited Applications:

WB

Isotype:

Species Specificity: human, mouse Cited Species: human Positive Controls:

WB: HEK-293 cells, mouse pancreas tissue, HepG2

cells

IHC: human pancreas tissue, human heart tissue

IF: HepG2 cells,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

## **Background Information**

EGLN1, also named as PHD2, SM-20, HPH-2 and HIF-PH2, catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. It hydroxylates HIF-1 alpha at 'Pro-402' and 'Pro-564', and HIF-2 alpha. EGLN1 functions as a cellular oxygen sensor and, under normoxic conditions, targets HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Defects in EGLN1 are the cause of erythrocytosis familial type 3 (ECYT3). EGLN1 has 3 isoforms with MW of 46 kDa, 44 kDa and 36 kDa produced by alternative splicing. It mainly localizes in cytoplasm and can shuttle between the nucleus and cytoplasm (PubMed:19631610). The antibody is specific to EGLN1.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Dong Zhao	35169254	Oncogene	WB
Yu-Zhao Wang	36629160	Asian J Androl	WB

Storage

Storage:

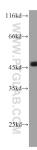
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

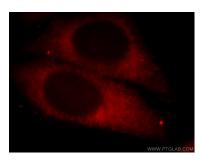
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

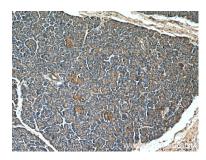
## **Selected Validation Data**



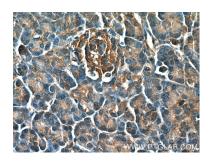
HEK-293 cells were subjected to SDS PAGE followed by western blot with 20368-1-AP (PHD2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of HepG2 cells, using EGLN1 antibody 20368-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



Immunohistochemical analysis of paraffinembedded human pancreas tissue slide using 20368-1-AP (PHD2 antibody at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human pancreas tissue slide using 20368-1-AP (PHD2 antibody at dilution of 1:200 (under 40x lens).