

For Research Use Only

# PHD2/EGLN1 Polyclonal antibody

Catalog Number: 20368-1-AP

3 Publications



## Basic Information

### Catalog Number:

20368-1-AP

### Concentration:

700 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_022051

### GeneID (NCBI):

54583

### UNIPROT ID:

Q9GZT9

### Full Name:

egl nine homolog 1 (C. elegans)

### Calculated MW:

46 kDa

### Observed MW:

46 kDa, 36 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:1000

IHC 1:100-1:400

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

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

### Positive Controls:

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

**IHC** : human pancreas tissue, human heart tissue

**IF/ICC** : HepG2 cells,

## 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
Christopher Tuffs	39566823	Am J Pathol	WB, IHC
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

For technical support and original validation data for this product please contact:

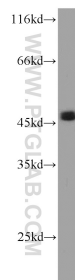
T: 4006900926

E: Proteintech-CN@ptglab.com

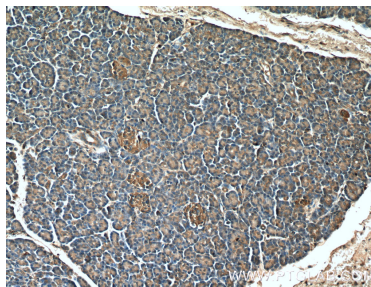
W: ptgcn.com

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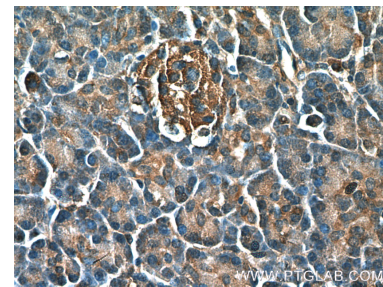
## Selected Validation Data



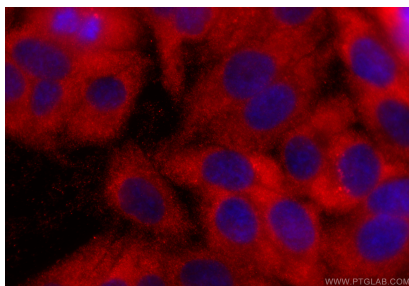
HEK-293 cells were subjected to SDS PAGE followed by western blot with 20368-1-AP (PHD2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



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



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



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PHD2/EGLN1 antibody (20368-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).