

For Research Use Only

PHD2/EGLN1 Monoclonal antibody

Catalog Number: 66589-1-Ig

Featured Product

5 Publications



Basic Information

Catalog Number:

66589-1-Ig

Size:

150ul, Concentration: 1900 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

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, 44 kDa, 36 kDa

Purification Method:

Protein G purification

CloneNo.:

1A2F1

Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:150-1:600

IF/ICC 1:400-1:1600

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat, pig

Cited Species:

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 : mouse brain tissue, SH-SY5Y cells, pig brain tissue, HEK-293 cells

IHC : human testis tissue, human kidney tissue

IF/ICC : HEK-293 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 |
|--------------|-----------|---------------------|-------------|
| Jinsheng Zhu | 34422822 | Front Cell Dev Biol | WB |
| Simin Tan | 40005048 | Nutrients | WB |
| Kaixin Liu | 39826283 | Phytomedicine | IF |

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

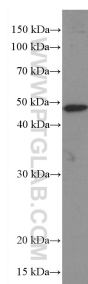
For technical support and original validation data for this product please contact:

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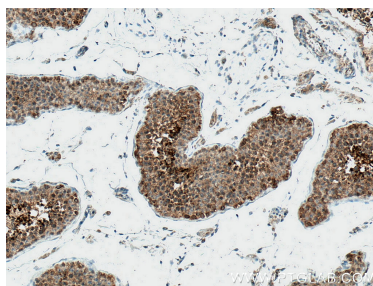
E: proteintech@ptglab.com
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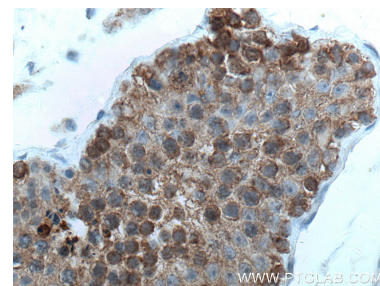
Selected Validation Data



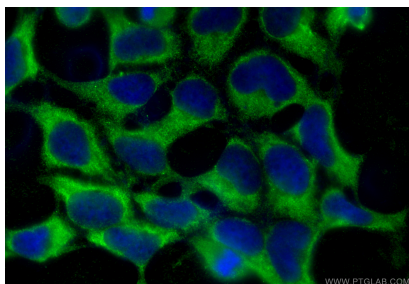
mouse brain tissue were subjected to SDS PAGE followed by western blot with 66589-1-Ig (EGLN1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 66589-1-Ig (EGLN1 antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 66589-1-Ig (EGLN1 antibody) at dilution of 1:300 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using PHD2/EGLN1 antibody (66589-1-Ig, Clone: 1A2F1) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).