

For Research Use Only

PHD2/EGLN1 Monoclonal antibody

Catalog Number: 66589-1-Ig

Featured Product

5 Publications



Basic Information

Catalog Number:

66589-1-Ig

Concentration:

1900 ug/ml

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

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

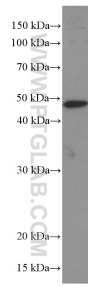
T: 4006900926

E: Proteintech-CN@ptglab.com

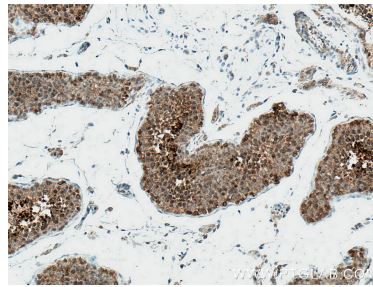
W: ptgcn.com

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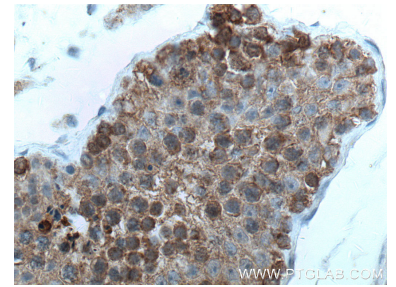
Selected Validation Data



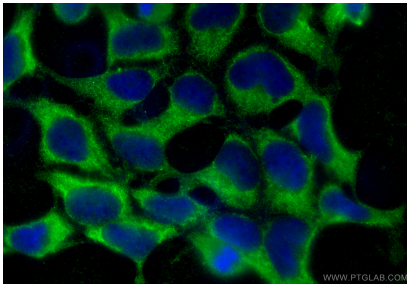
mouse brain tissue were subjected to SDS PAGE followed by western blot with 66589-1-Ig (EGLN1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



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).