

For Research Use Only

PHD2/EGLN1 Monoclonal antibody

Catalog Number: 66589-1-Ig **2 Publications**



Basic Information

Catalog Number: 66589-1-Ig	GenBank Accession Number: NM_022051	Purification Method: Protein G purification
Size: 150ul, Concentration: 1900 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 54583	CloneNo.: 1A2F1
Source: Mouse	UNIPROT ID: Q9GZT9	Recommended Dilutions: WB 1:1000-1:6000 IHC 1:150-1:600 IF 1:50-1:500
Isotype: IgG1	Full Name: egl nine homolog 1 (C. elegans)	
	Calculated MW: 46 kDa	
	Observed MW: 46 kDa, 44 kDa, 36 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls: WB : mouse brain tissue, SH-SY5Y cells, pig brain tissue, HEK-293 cells IHC : human testis tissue, human kidney tissue IF : HEK-293 cells,
Cited Applications: WB	
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

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
Jian Xie	38454480	J Transl Med	WB

Storage

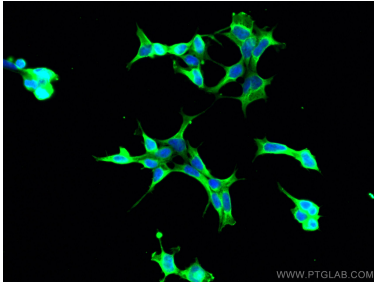
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

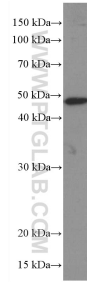
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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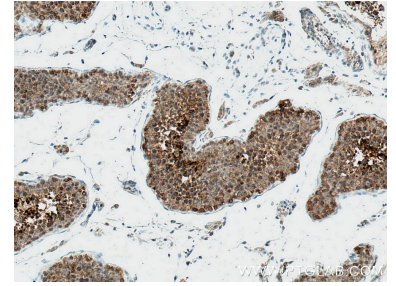
Selected Validation Data



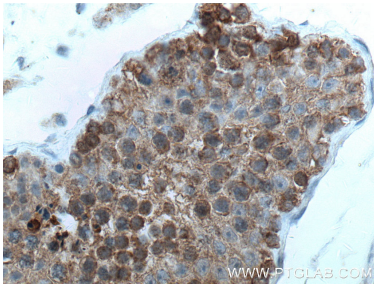
Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using PHD2/EGLN1 antibody (66589-1-Ig, Clone: 1A2F1) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



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).