Datasheet for ABIN702640

anti-EGLN1 antibody (AA 42-140)

2 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	EGLN1
Binding Specificity:	AA 42-140
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This EGLN1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human PHD2
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Cow,Pig,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	EGLN1

Target Details

Alternative Name:	PHD2 (EGLN1 Products)
Background:	Synonyms: HPH2, PHD2, SM20, ECYT3, HPH-2, HIFPH2, ZMYND6, C1orf12, HIF-PH2, Egl nine homolog 1, Hypoxia-inducible factor prolyl hydroxylase 2, HIF-prolyl hydroxylase 2, Prolyl hydroxylase domain-containing protein 2, SM-20, EGLN1, PNAS-118, PNAS-137 Background: Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. Hydroxylates a specific proline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C-terminal, CODD) of HIF1A. Also hydroxylates HIF2A. Has a preference for the CODD site for both HIF1A and HIF1B. Hydroxylated HIFs are then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Under hypoxic conditions, the hydroxylation reaction is attenuated allowing HIFs to escape degradation resulting in their translocation to the nucleus, heterodimerization with HIF1B, and increased expression of hypoxy-inducible genes. EGLN1 is the most important isozyme under normoxia and, through regulating the stability of HIF1, involved in various hypoxia-influenced processes such as angiogenesis in retinal and cardiac functionality. Target proteins are preferencially recognized via a LXXLAP motif.
Gene ID:	54583
UniProt:	Q9GZT9
Pathways:	cAMP Metabolic Process, Warburg Effect

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Restrictions:	For Research Use only

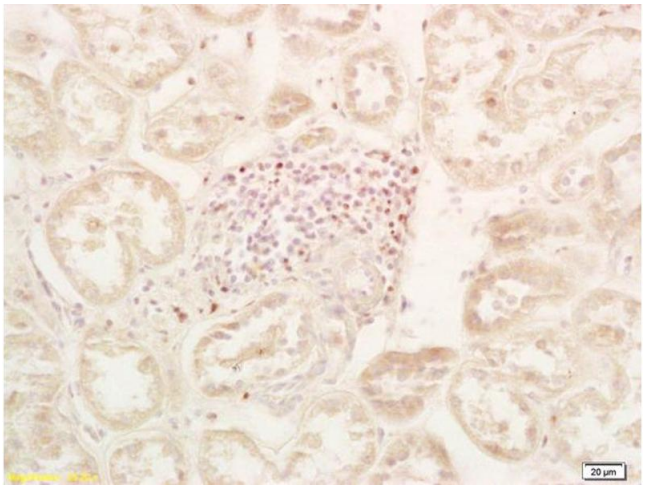
Handling

Format:	Liquid
Concentration:	1 μg/μL

Handling

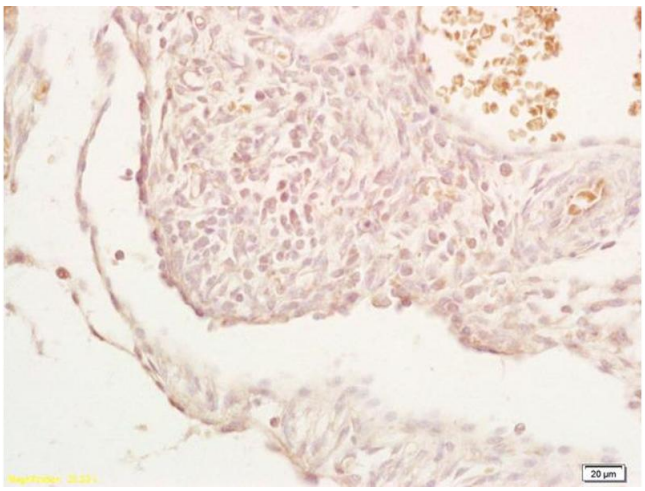
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded human kidney labeled with Anti-PHD2 Polyclonal Antibody, Unconjugated (ABIN702640) at 1:200, followed by conjugation to the secondary antibody and DAB staining



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded mouse embryo labeled with Anti-PHD2 Polyclonal Antibody, Unconjugated (ABIN702640) at 1:200, followed by conjugation to the secondary antibody and DAB staining