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Datasheet for ABIN2805290

anti-EGLN1 antibody (AA 42-140) (AbBy Fluor® 594)

Overview

Quantity:	100 µL
Target:	EGLN1
Binding Specificity:	AA 42-140
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This EGLN1 antibody is conjugated to AbBy Fluor® 594
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

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
Alternative Name:	PHD2 (EGLN1 Products)

Target Details

Background: Synonyms: HPH2, PHD2, SM20, EYPT3, 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 hypoxia-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 preferentially recognized via a LXXLAP motif.

Gene ID: 54583

UniProt: [Q9GZT9](#)

Pathways: [cAMP Metabolic Process](#), [Warburg Effect](#)

Application Details

Application Notes: 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

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be

Handling

handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Expiry Date: 12 months