

## DATASHEET

# EGLN1 Rabbit Polyclonal Antibody

CAT. NO. APA12580

### KEY FEATURES

Target	EGLN1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

### 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.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to EGLN1
Specificity	Recognizes endogenous levels of EGLN1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human EGLN1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 36; Observed: 46 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	C1orf12; Egl nine homolog 1; Hypoxia-inducible factor prolyl hydroxylase 2; HIF-PH2; HIF-prolyl hydroxylase 2; HPH-2; Prolyl hydroxylase domain-containing protein 2; PHD2; SM-20
Gene Symbol	EGLN1
Entrez Gene	54583(Human); 112405(Mouse)
SwissProt	Q9GZT9(Human); Q91YE3(Mouse); P59722(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arex.bio](mailto:info@arex.bio) or your local distributor.

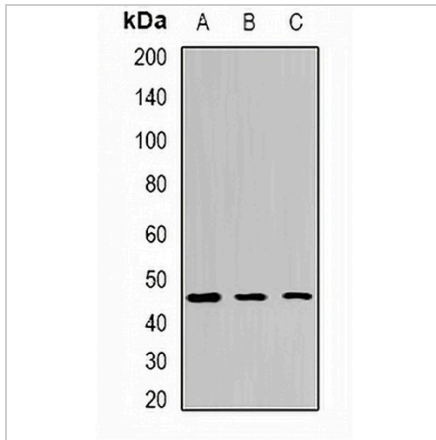
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

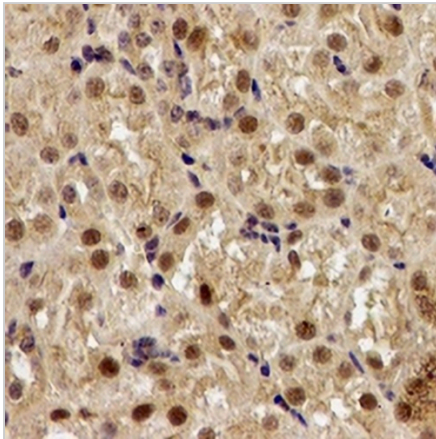
**EGLN1 Rabbit Polyclonal Antibody**

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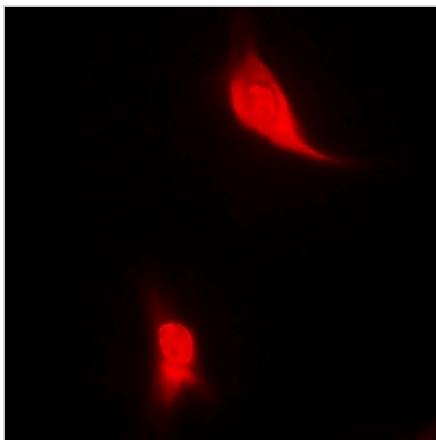
**DATA**



Western blot analysis of EGLN1 expression in SHSY5Y (A), HeLa (B), COS7 (C) whole cell lysates. (Predicted band size: 36; 43; 46 kD; Observed band size: 46 kD)



Immunohistochemical analysis of EGLN1 staining in human kidney formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of EGLN1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.