#### **Product Datasheet**

# **EGLN1** Antibody

Catalog No: #32185

Package Size: #32185-1 50ul #32185-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

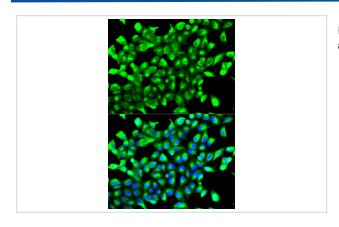
## Description

Product Name	EGLN1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	IF
Species Reactivity	Human
Specificity	The antibody detects endogenous level of total EGLN1 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human EGLN1.
Target Name	EGLN1
Other Names	EGLN1; C1orf12; DKFZp761F179; ECYT3; HIFPH2
Accession No.	Swiss-Prot:Q9GZT9NCBI Gene ID:54583
SDS-PAGE MW	46KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02%
	sodium azide and 50% glycerol.
Storage	Store at -20°C

## **Application Details**

IF 1:50 - 1:200

#### **Images**



Immunofluorescence analysis of MCF-7 cells using EGLN1 antibody. Blue: DAPI for nuclear staining.

## Background

PHD1 (Egln2), PHD-2 (Egln1), and PHD3 (Egln3) are members of the Egln family of proline hydroxylases. They function as oxygen sensors that catalyze the hydroxylation of HIF on prolines 564 and 402, initiating the first step of HIF degradation through the VHL/ubiquitin pathway (1,2). PHD1 is

highly expressed in a wide array of tissues whereas PHD2 and PHD3 are expressed mainly in heart and skeletal muscle (1,3). The mRNA levels of PHD are upregulated by HIF through the hypoxia-response element under low oxygen conditions (4-7). These three enzymes also exhibit different peptide specificity target proteins, PHD1 and PHD2 can hydroxylate both proline 402 and proline 564, but PHD3 can only hydroxylate proline 564 (2,8). In addition to HIF, PHD enzymes have also has been shown to catalyze the hydroxylation of RNA polymerase subunits and myogenin (3,9).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.