

## Product datasheet for **TA301539**

### EGLN1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	FC, WB
Recommended Dilution:	WB: 1: 1000
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to a C-terminal fragment of the human protein sequence of HIF prolyl hydroxylase 2 (residues 350-426).
Formulation:	Tris-citrate/phosphate, pH 7-8, 0.09% sodium Azide
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	egl-9 family hypoxia inducible factor 1
Database Link:	<a href="#">NP_071334</a> <a href="#">Entrez Gene 54583 Human</a> <a href="#">Q9GZT9</a>



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**Background:**

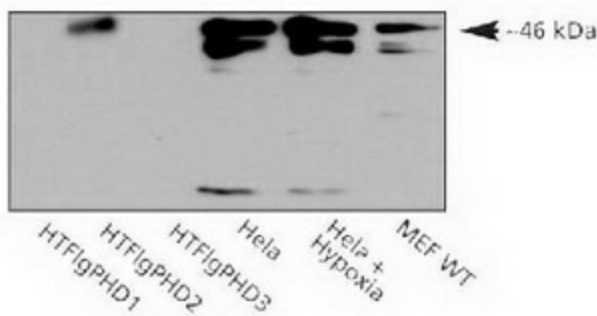
HIF prolyl hydroxylase 2 is a prolyl hydroxylase that modifies HIF-alpha. Classic prolyl hydroxylases are found in the endoplasmic reticulum and modify collagen, whereas HIF is an intracellular protein and the HPH sites do not resemble those modifying collagen. HIF is a transcriptional complex that plays a critical role in oxygen homeostasis. HPH is an essential component of the pathway through which cells sense oxygen. In the presence of oxygen, HPHs convert specific prolyl residues in HIF-alpha to hydroxyproline, leading to HIF-alpha destruction. Low oxygen levels, sensed at the cellular level, cause the HIF conversion to be reduced so that HIF is stable and there is increased angiogenesis. HPH-2, specifically, catalyzes the posttranslational formation of 4-hydroxyproline in HIF alpha proteins. It hydroxylates HIF-1 alpha at Pro(402) and Pro(564), and HIF-2 alpha. It targets HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitylation complex.

**Synonyms:**

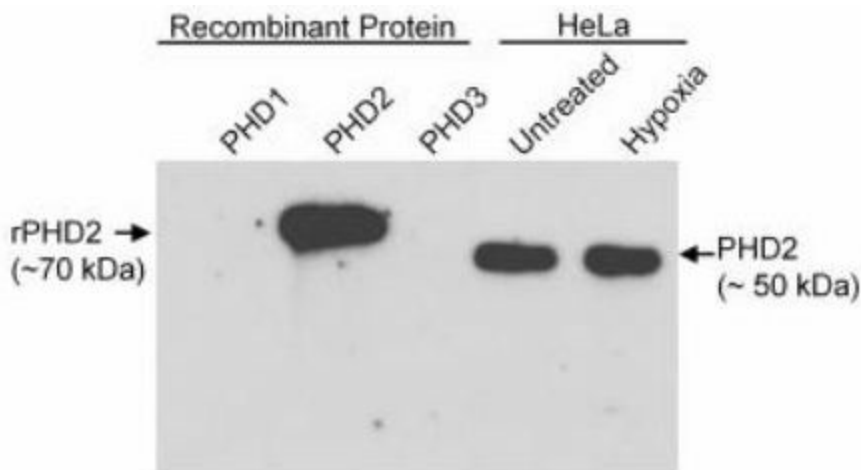
C1orf12; ECTY3; HALAH; HIF-PH2; HIFPH2; HPH-2; HPH2; PHD2; SM20; ZMYND6

**Protein Pathways:**

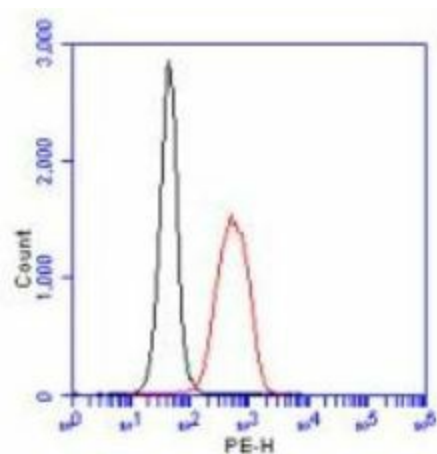
Pathways in cancer, Renal cell carcinoma

**Product images:**


Western blot analysis of human PHD2. Samples: Recombinant FLAG-His-PHD1, PHD2 and PHD3 (10 ng/lane), HeLa whole cell lysate and MEFs.



Western Blot: HIF Prolyl Hydroxylase 2 Antibody - Detection of Human PHD2 by Western Blot. Samples: Recombinant epitope-tagged PHD1, PHD2 or PHD3 (10 ng/lane) or whole cell lysate from HeLa cells, stained with rabbit anti-PHD2 used at 1 ug/ml.



Flow Cytometry: HIF Prolyl Hydroxylase 2 Antibody - Flow cytometric detection of PHD2, 10<sup>6</sup> Jurkat cells were fixed, permeabilized, and stained with 3.0 ug/ml anti-PHD2 in a 150 ul reaction.