

## Product datasheet for **TA321892**

### EGLN1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500-2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein corresponding to C terminal 126 amino acids of human egl nine homolog 1 (C. elegans)
Formulation:	PBS pH7.3, 0.05% NaN <sub>3</sub> , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	46 kDa
Gene Name:	egl-9 family hypoxia inducible factor 1
Database Link:	<a href="#">NP_071334</a> <a href="#">Entrez Gene 112405 MouseEntrez Gene 308913 RatEntrez Gene 54583 Human Q9GZT9</a>



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**Background:**

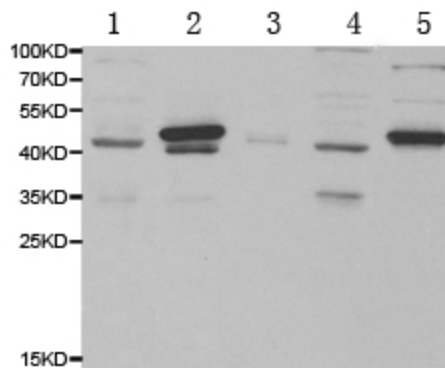
PHD1 (Egln2), PHD-2 (Egln1), and PHD3 (Egln3) are members of the EglN family of proline hydroxylases. They function as oxygen sensors that catalyze the hydroxylation of HIF on prolines 564 and 402, initiating the first step of HIF degradation through the VHL/ubiquitin pathway. PHD1 is highly expressed in a wide array of tissues whereas PHD2 and PHD3 are expressed mainly in heart and skeletal muscle. The mRNA levels of PHD are upregulated by HIF through the hypoxia-response element under low oxygen conditions. 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. In addition to HIF, PHD enzymes have also has been shown to catalyze the hydroxylation of RNA polymerase subunits and myogenin.

**Synonyms:**

C1orf12; ECYT3; HALAH; HIF-PH2; HIFPH2; HPH-2; HPH2; PHD2; SM20; ZMYND6

**Protein Pathways:**

Pathways in cancer, Renal cell carcinoma

**Product images:**

Predicted band size: 46 kDa. Positive control: OVCAR8, COS7, U2OS, SH-SY5Y and Hela cell lysate. Recommended dilution: 1/500-2000. (Gel: 10%SDS-PAGE Lane 1: OVCAR8 cell lysate Lane 2: COS7 cell lysate Lane 3: U2OS cell lysate Lane 4: SH-SY5Y cell lysate Lane 5: Hela cell lysate Lysates: 40 ug per lane Primary antibody: 1/500 dilution Secondary antibody: Goat anti Rabbit IgG - H&L (HRP) at 1/10000 dilution Exposure time: 1 minute)