

ARG41892 anti-EGLN2 / PHD1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes EGLN2 / PHD1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	EGLN2 / PHD1
Species	Human
Immunogen	Synthetic peptide of Human EGLN2 / PHD1.
Conjugation	Un-conjugated
Alternate Names	EIT6; HPH-3; HPH-1; HIF-prolyl hydroxylase 1; Egl nine homolog 2; EC 1.14.11.29; Estrogen-induced tag 6; PHD1; Prolyl hydroxylase domain-containing protein 1; HIFPH1; HIF-PH1; Hypoxia-inducible factor prolyl hydroxylase 1

Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	
Observed Size	~ 44 kDa	

Properties

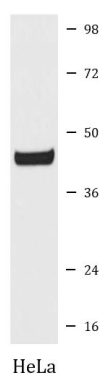
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	EGLN2
Gene Full Name	egl-9 family hypoxia-inducible factor 2
Background	The hypoxia inducible factor (HIF) is a transcriptional complex that is involved in oxygen homeostasis. At normal oxygen levels, the alpha subunit of HIF is targeted for degradation by prolyl hydroxylation. This gene encodes an enzyme responsible for this post-translational modification. Alternative splicing results in multiple transcript variants. Read-through transcription also exists between this gene and the upstream RAB4B (RAB4B, member RAS oncogene family) gene. [provided by RefSeq, Feb 2011]
Function	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 HIF2A. 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. EGLN2 is involved in regulating hypoxia tolerance and apoptosis in cardiac and skeletal muscle. Also regulates susceptibility to normoxic oxidative neuronal death. Links oxygen sensing to cell cycle and primary cilia formation by hydroxylating the critical centrosome component CEP192 which promotes its ubiquitination and subsequent proteasomal degradation. Hydroxylates IKBKB, mediating NF-kappaB activation in hypoxic conditions. Target proteins are preferentially recognized via a LXXLAP motif. [UniProt]
Calculated Mw	44 kDa
Cellular Localization	Nucleus. [UniProt]

Images



ARG41892 anti-EGLN2 / PHD1 antibody WB image

Western blot: HeLa cell lysate stained with ARG41892 anti-EGLN2 / PHD1 antibody.