

Egln2 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al11617

Specification

Egln2 antibody - C-terminal region - Product Information

Application WB
Primary Accession O6AYU4

Other Accession <u>NM 001004083</u>, <u>NP 001004083</u>

Reactivity Human, Mouse, Rat, Rabbit, Zebrafish,

Horse, Bovine, Dog

Predicted Mouse, Rat, Pig, Horse, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 45kDa KDa

EgIn2 antibody - C-terminal region - Additional Information

Gene ID 308457

Alias Symbol MGC93662, MGC93666, PHD-1, PHD1,

HPH-1, HPH-3, HIF-PH1

Other Names

Egl nine homolog 2, 1.14.11.29, HPH-3, Hypoxia-inducible factor prolyl hydroxylase 1, HIF-PH1, HIF-prolyl hydroxylase 1, HPH-1, Prolyl hydroxylase domain-containing protein 1, PHD1, Egln2

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-Egln2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

Egln2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Egln2 antibody - C-terminal region - Protein Information

Name Egln2 {ECO:0000312|RGD:631376}

Function

Prolyl hydroxylase that mediates hydroxylation of proline residues in target proteins, such as ATF4, IKBKB, CEP192 and HIF1A (PubMed:15925519). Target proteins are preferentially recognized via a LXXLAP motif (By similarity). Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation of 4- hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins (PubMed:15925519).



Hydroxylates a specific proline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C- terminal, CODD) of HIF1A (By similarity). Also hydroxylates HIF2A (By similarity). Has a preference for the CODD site for both HIF1A and HIF2A (By similarity). Hydroxylated HIFs are then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex (By similarity). 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 hypoxy-inducible genes (By similarity). EGLN2 is involved in regulating hypoxia tolerance and apoptosis in cardiac and skeletal muscle (By similarity). Also regulates susceptibility to normoxic oxidative neuronal death (By similarity). 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 (By similarity). Hydroxylates IKBKB, mediating NF-kappa-B activation in hypoxic conditions (By similarity). Also mediates hydroxylation of ATF4, leading to decreased protein stability of ATF4 (By similarity).

Cellular Location Nucleus.

Tissue Location

Expressed in heart, kidney, brain, liver, skeletal muscle, lung and spleen. Highest level in testis

Egln2 antibody - C-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Egln2 antibody - C-terminal region - Images



WB Suggested Anti-EgIn2 Antibody Titration: 1.0 µg/ml

Positive Control: Rat Muscle