

32-6075: Mouse Anti Human Egl nine homolog 1(Clone:PAT21E9AT.)

Clonality :	Monoclonal
Clone Name :	PAT21E9AT.
Application :	ELISA,WB
Gene :	EGLN1
Gene ID :	54583
Uniprot ID :	Q9GZT9
Format :	Purified
Alternative Name :	Egl nine homolog 1,Hypoxia-inducible factor prolyl hydroxylase 2,HIF-PH2,HIF-prolyl hydroxylase 2,HPH-2,Prolyl hydroxylase domain-containing protein 2,PHD2,SM-20,EGLN1,HPH2,SM20,ECYT3,HIFPH2,ZMYND6,C1orf12,DKFZp761F179.
Isotype :	Mouse IgG2b heavy chain and ? light chain.
Immunogen Information :	Anti-human EGLN1 mAb, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with recombinant human EGLN1 amino acids 271-426 purified from E. coli.

Description

EGLN1 catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. HIF is a transcriptional complex which has a vital role in mammalian oxygen homeostasis. PHD1 (Egln2), PHD-2 (Egln1), and PHD3 (Egln3) belong to the Egl family of proline hydroxylases. The EGLN family that is known to be a cellular oxygen sensor initiates the first step of HIF degradation through the VHL/ubiquitin pathway. PHD1 and PHD2 hydroxylate both proline 402 and proline 564, however PHD3 can only hydroxylate proline 564. Other than HIF, PHD enzymes catalyze the hydroxylation of RNA polymerase subunits and myogenin. The EGLN1 protein functions as a cellular oxygen sensor. Under normal oxygen concentration, modification by prolyl hydroxylation is a key regulatory event which targets HIF subunits for proteasomal destruction via the von Hippel-Lindau ubiquitylation complex. Mutations in the EGLN1 gene are linked to erythrocytosis familial type 3 (ECYT3).

Product Info

Amount :	20 µg
Purification :	EGLN1 antibody was purified from mouse ascitic fluids by protein-G affinity chromatography.
Content :	1mg/ml containing PBS, pH-7.4, & 0.1% Sodium Azide.
Storage condition :	For periods up to 1 month store at 4°C, for longer periods of time, store at -20°C. Prevent freeze thaw cycles.

Application Note

EGLN1 antibody has been tested by ELISA and Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended dilution range for Western blot and Immunofluorescence analysis is 1:500 ~ 1000. Recommended starting dilution is 1:500.