

EGLN3 Antibody

Catalog No: #35893

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

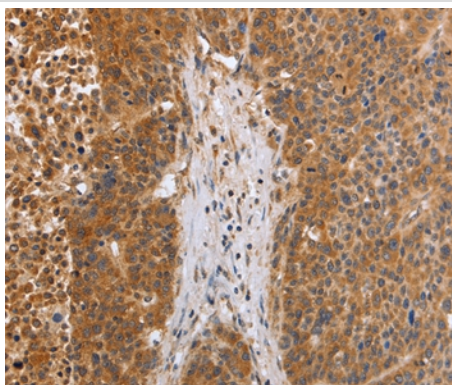
Description

Product Name	EGLN3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antigen affinity purification.
Applications	IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total EGLN3 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Full length fusion protein
Target Name	EGLN3
Other Names	PHD3; HIFPH3; HIFP4H3
Accession No.	Swiss-Prot#: Q9H6Z9NCBI Gene ID: 112399Gene Accssion: BC064924
Uniprot	Q9H6Z9
GeneID	112399;
Concentration	0.9mg/ml
Formulation	Rabbit IgG in pH7.4 PBS, 0.05% NaN ₃ , 40% Glycerol.
Storage	Store at -20°C

Application Details

Immunohistochemistry: 1:25-1:100

Images



Immunohistochemical analysis of paraffin-embedded Human liver cancer tissue using #35893 at dilution 1/30.

Background

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. Hydroxylation on the NODD site by EGLN3 appears to require prior hydroxylation on the CODD site. 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. EGLN3 is the most important isozyme in limiting physiological activation of HIFs (particularly HIF2A) in hypoxia. Also hydroxylates PKM in hypoxia, limiting glycolysis. Under normoxia, hydroxylates and regulates the stability of ADRB2. Regulator of cardiomyocyte and neuronal apoptosis. In cardiomyocytes, inhibits the anti-apoptotic effect of BCL2 by disrupting the BAX-BCL2 complex.

Note: This product is for in vitro research use only