Anti-EPAS-1 (Acetyl K385) antibody

Description	Rabbit polyclonal to Acetyl-EPAS-1 (K385).

Model	STJ97799
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	synthetic peptide derived from Acetyl-EPAS-1 (K385).
Gene ID	2034
Gene Symbol	EPAS1
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	Acetyl-EPAS-1 (K385) Polyclonal Antibody detects endogenous levels of Acetyl-EPAS-1 (K385)
Tissue Specificity	Expressed in most tissues, with highest levels in placenta, lung and heart. Selectively expressed in endothelial cells.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Endothelial PAS domain-containing protein 1 EPAS-1 Basic-helix-loop-helix-PAS protein MOP2 Class E basic helix-loop-helix protein 73 bHLHe73 HIF-1-alpha-like factor HLF Hypoxia-inducible factor 2-alpha HIF-2
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3374OMIM:603349
Alternative Names	Endothelial PAS domain-containing protein 1 EPAS-1 Basic-helix-loop-helix-PAS protein MOP2 Class E basic helix-loop-helix protein 73 bHLHe73 HIF-1-alpha-like factor HLF Hypoxia-inducible factor 2-alpha HIF-2
Function	Transcription factor involved in the induction of oxygen regulated genes. Binds to core DNA sequence 5'-[AG]CGTG-3' within the hypoxia response element (HRE) of target gene promoters. Regulates the vascular endothelial growth factor (VEGF) expression and seems to be implicated in the development of blood vessels and the tubular system of lung. May also play a role in the formation of the endothelium that gives rise to the blood brain barrier. Potent activator of the Tie-2 tyrosine kinase expression. Activation seems to require recruitment of transcriptional coactivators such as CREBBP and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD.
Cellular Localization	Nucleus Nucleus speckle. Colocalizes with HIF3A in the nucleus and speckles.
Post-translational Modifications	In normoxia, is probably hydroxylated on Pro-405 and Pro-531 by EGLN1/PHD1, EGLN2/PHD2 and/or EGLN3/PHD3. The hydroxylated prolines promote interaction with VHL, initiating rapid ubiquitination and subsequent proteasomal degradation. Under hypoxia, proline hydroxylation is impaired and ubiquitination is attenuated, resulting in stabilization . In normoxia, is hydroxylated on Asn-847 by HIF1AN thus probably abrogating interaction with CREBBP and EP300 and preventing transcriptional activation. Phosphorylated on multiple sites in the CTAD. The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within HIF CTAD domains.