EPAS-1 Rabbit pAb

CatalogNo: YT5325 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- IF,WB,IHC,ELISA

MW
- 96kD (Calculated)

110-120kD (Observed)

Isotype
- IgG

Recommended Dilution Ratios

IF 1:50-200
WB 1:500-1:2000
IHC: 1:100-1:300
ELISA 1:20000
Not yet tested in other applications

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	Synthesized peptide derived from human EPAS-1 around the non-acetylation site of K385.
Specificity	EPAS-1 Polyclonal Antibody detects endogenous levels of EPAS-1 protein.

Target Information

Gene name EPAS1 BHLHE73 HIF2A MOP2 PASD2

Protein Name Endothelial PAS domain-containing protein 1

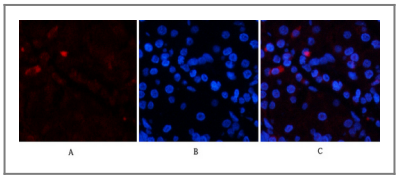
Organism	Gene ID	UniProt ID
Human	2034;	Q99814;
Mouse	13819;	P97481;
Rat	29452;	Q9JHS1;

Cellular Localization Nucleus . Nucleus speckle . Colocalizes with HIF3A in the nucleus and speckles. .

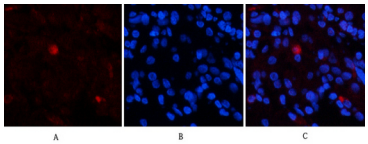
Tissue specificity Expressed in most tissues, with highest levels in placenta, lung and heart. Selectively expressed in endothelial cells.

Function Disease:Defects in EPAS1 are the cause of erythrocytosis familial type 4 (ECYT4) [MIM:611783]. ECYT4 is an autosomal dominant disorder characterized by increased serum red blood cell mass, elevated hemoglobin concentration and hematocrit, and normal platelet and leukocyte counts.,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 CREBPB and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD.,PTM:In normoxia, is hydroxylated on Asn-847 by HIF1AN thus probably abrogating interaction with CREBBP and EP300 and preventing transcriptional activation.,PTM: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.,PTM:Phosphorylated on multiple sites in the CTAD.,PTM:The iron and 2-oxoglutarate dependent 3-hydroxylation of asparagine is (S) stereospecific within HIF CTAD domains.,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,similarity:Contains 1 PAC (PAS-associated C-terminal) domain.,similarity:Contains 2 PAS (PER-ARNT-SIM) domains.,subunit:Efficient DNA binding requires dimerization with another bHLH protein. Heterodimerizes with ARNT. Interacts with CREBBP.,tissue specificity:Expressed in most tissues, with highest levels in placenta, lung and heart. Selectively expressed in endothelial cells.,

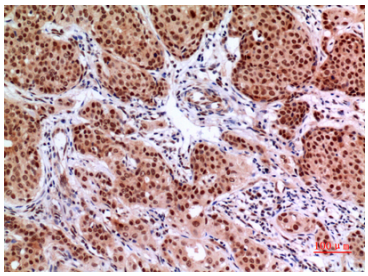
Validation Data



Immunofluorescence analysis of human-stomach tissue. 1,EPAS-1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

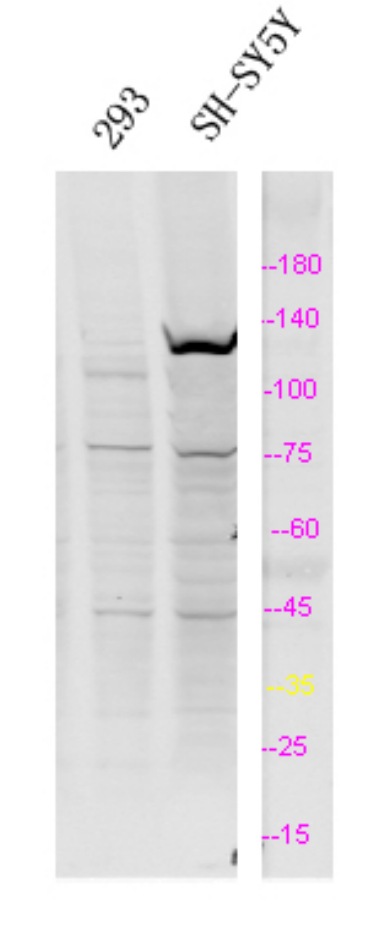


Immunofluorescence analysis of human-stomach tissue. 1,EPAS-1 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded human-mammary-cancer, antibody was diluted at 1:100

Immunohistochemical analysis of paraffin-embedded human-colon, antibody was diluted at 1:100



Western Blot analysis of Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti EPAS-1 antibody. Lane 1: 293(negtive control) Lane 2: SH-SY5Y Predicted band size: 95kDa Observed band size: 120kDa

Contact information

Orders: order.cn@immunoway.com
Support: support.cn@immunoway.com
Telephone: 400-8787-807(China)
Website: http://www.immunoway.com.cn
Address: 2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
EPAS-1 Rabbit pAb