

## Product datasheet for **AP23352PU-N**

### Epas1 (202-240) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 0.1-0.5 µg/ml with the appropriate system to detect HIF-2α in cells and tissues. <b>Immunohistochemistry on Paraffin Sections:</b> 0.5-1 µg/ml to detect HIF-2α in formalin fixed and paraffin embedded tissues. Bioling the sections is required. <b>Immunohistochemistry on Frozen Sections:</b> 0.5-1 µg/ml to detect HIF-2α in formalin or acetone fixed tissues.
Reactivity:	Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic peptide corresponding to a sequence at N-terminus of Rat HIF-2-alpha (202-240)
Specificity:	This antibody detects HIF2A / HIF2 alpha (202-240). No cross reactivity with other proteins.
Formulation:	5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal and 0.05mg Sodium Azide State: Aff - Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification:	Immunogen Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	endothelial PAS domain protein 1



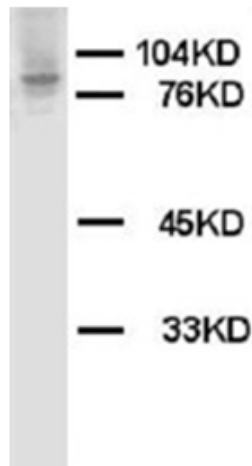
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**Database Link:** [Entrez Gene 13819 Mouse](#)[Entrez Gene 29452 Rat](#)  
[Q9JHS1](#)

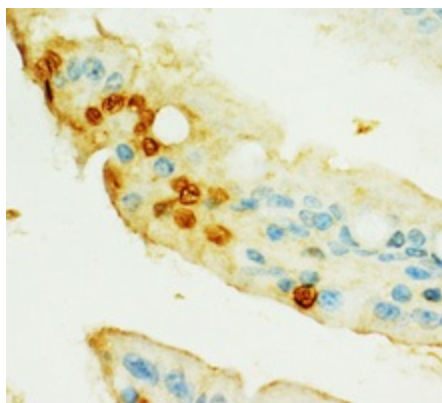
**Background:** HIF-2 alpha is also designated EPAS1 whose gene is mapped to 2p21-p16. The predicted mouse protein is 88% identical to human EPAS1. The human EPAS1 gene contains 15 exons and spans at least 120 kb. The positions of the introns within the genomic region encoding the N-terminal bHLH-PAS domains of EPAS1 and AHR are similar, suggesting that the 5-prime ends of the 2 genes may have arisen from a gene duplication event. Moreover, the predicted protein shares 48% sequence identity with HIF1-alpha, a bHLH-PAS transcription factor that induces EPO gene expression in cultured cells in response to hypoxia. Like HIF1A, EPAS1 binds to and activates transcription from the HIF1A response element derived from the 3-prime flanking region of the EPO gene. EPAS1 is predominantly expressed in highly vascularized tissues of adult humans and in endothelial cells of the mouse adult and embryo. Furthermore, EPAS1 may represent an important regulator of vascularization, perhaps involving the regulation of endothelial cell gene expression in response to hypoxia. HIF2A is expressed at relatively higher levels in villus sections of placenta and in lung samples compared with other tissues examined. In addition, The variation in EPAS1 influences the relative contribution of aerobic and anaerobic metabolism and hence the maximum sustainable metabolic power for a given event duration.

**Synonyms:** BHLHE73, HIF-2 alpha, MOP2, PASD2, Hypoxia-inducible factor 2 alpha, HIF-1 alpha-like factor, HLF, HIF-related factor, EPAS1

**Product images:**



Western Blot: Rat Brain Tissue Lysate



Immunohistochemistry on Paraffin Sections: Rat Small Intestine Tissue stained with HIF-2A Polyclonal Antibody