

Mouse Epas1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21549b

Product Information

Application	WB, E
Primary Accession	P97481
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB51058
Calculated MW	96712

Additional Information

Gene ID	13819
Other Names	Endothelial PAS domain-containing protein 1, EPAS-1, HIF-1-alpha-like factor, HLF, mHLF, HIF-related factor, HRF, Hypoxia-inducible factor 2-alpha, HIF-2-alpha, HIF2-alpha, Epas1, Hif2a
Target/Specificity	This Mouse Epas1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 713-747 amino acids from the C-terminal region of Mouse Epas1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Epas1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Epas1
Synonyms	Hif2a
Function	Transcription factor involved in the induction of oxygen regulated genes. Heterodimerizes with ARNT; heterodimer binds to core DNA sequence

5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters (PubMed:[26245371](#)). 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 requires recruitment of transcriptional coactivators such as CREBBP and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD (By similarity).

Cellular Location

Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00981, ECO:0000269 | PubMed:21546903}. Nucleus speckle. Note=Colocalizes with HIF3A isoform 2 in the nucleus and speckles.

Tissue Location

Expressed in most tissues, with highest levels in lung, followed by heart, kidney, brain and liver. Predominantly expressed in endothelial cells. Also found in smooth muscle cells of the uterus, neurons, and brown adipose tissue. High expression in embryonic choroid plexus and kidney glomeruli

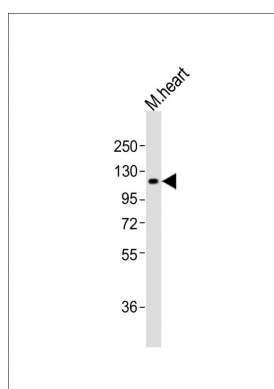
Background

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 requires recruitment of transcriptional coactivators such as CREBBP and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD (By similarity).

References

Tian H.,et al.Genes Dev. 11:72-82(1997).
Ema M.,et al.Proc. Natl. Acad. Sci. U.S.A. 94:4273-4278(1997).
Flamme I.,et al.Mech. Dev. 63:51-60(1997).
Lando D.,et al.Genes Dev. 16:1466-1471(2002).
Gradin K.,et al.J. Biol. Chem. 277:23508-23514(2002).

Images



Anti-Epas1 Antibody (C-term) at 1:2000 dilution + mouse heart lysates. Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa. Blocking/Dilution buffer: 5% NFDM/TBST.