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Mouse Epas1 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP21549b

Specification

Mouse Epas1 Blocking Peptide (C-term) - Product Information

Primary Accession P97481

Mouse Epas1 Blocking Peptide (C-term) - 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
The synthetic peptide sequence is selected from aa 713-727 of HUMAN Epas1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Epas1 Blocking Peptide (C-term) - Protein Information

Name Epas1

Synonyms Hif2a

Function
Transcription factor involved in the

Mouse Epas1 Blocking Peptide (C-term) - 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 CREBPB and probably EP300. Interaction with redox regulatory protein APEX seems to activate CTAD (By similarity).

Mouse Epas1 Blocking Peptide (C-term) - 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).

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

Mouse Epas1 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides