

## HIF3A Antibody (Center) Blocking peptide

Synthetic peptide  
Catalog # BP10221c

### Specification

#### HIF3A Antibody (Center) Blocking peptide - Product Information

Primary Accession [Q9Y2N7](#)  
Other Accession [NP\\_690007.1](#),  
[NP\\_690008.2](#),  
[NP\\_071907.3](#)

#### HIF3A Antibody (Center) Blocking peptide - Additional Information

Gene ID 64344

#### Other Names

Hypoxia-inducible factor 3-alpha,  
HIF-3-alpha, HIF3-alpha,  
Basic-helix-loop-helix-PAS protein MOP7,  
Class E basic helix-loop-helix protein 17,  
bHLHe17, HIF3-alpha-1, Inhibitory PAS  
domain protein, IPAS, Member of PAS  
protein 7, PAS domain-containing protein 7,  
HIF3A, BHLHE17, MOP7, PASD7

#### 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.

#### HIF3A Antibody (Center) Blocking peptide - Protein Information

Name HIF3A ([HGNC:15825](#))

Synonyms BHLHE17, MOP7, PASD7

#### HIF3A Antibody (Center) Blocking peptide - Background

The protein encoded by this gene is the alpha-3 subunit of one of several alpha/beta-subunit heterodimeric transcription factors that regulate many adaptive responses to low oxygen tension (hypoxia). The alpha-3 subunit lacks the transactivation domain found in factors containing either the alpha-1 or alpha-2 subunits. It is thought that factors containing the alpha-3 subunit are negative regulators of hypoxia-inducible gene expression. At least three transcript variants encoding three different isoforms have been found for this gene.

#### HIF3A Antibody (Center) Blocking peptide - References

Pasanen, A., et al. Int. J. Biochem. Cell Biol. 42(7):1189-1200(2010)  
Rajatapiti, P., et al. Neonatology 97(4):346-354(2010)  
Tanaka, T., et al. Biochem. J. 424(1):143-151(2009)  
Maynard, M.A., et al. Cell Cycle 6(22):2810-2816(2007)  
Kollers, S., et al. Anim. Genet. 37(6):595-596(2006)

**Function**

Acts as a transcriptional regulator in adaptive response to low oxygen tension. Acts as a regulator of hypoxia-inducible gene expression (PubMed:<a href="http://www.uniprot.org/citations/11573933" target="\_blank">11573933</a>, PubMed:<a href="http://www.uniprot.org/citations/16126907" target="\_blank">16126907</a>, PubMed:<a href="http://www.uniprot.org/citations/19694616" target="\_blank">19694616</a>, PubMed:<a href="http://www.uniprot.org/citations/20416395" target="\_blank">20416395</a>, PubMed:<a href="http://www.uniprot.org/citations/21069422" target="\_blank">21069422</a>). Functions as an inhibitor of angiogenesis in hypoxic cells of the cornea. Plays a role in the development of the cardiorespiratory system. May also be involved in apoptosis (By similarity).

**Cellular Location**

Nucleus. Cytoplasm Nucleus speckle {ECO:0000250|UniProtKB:Q0VBL6}. Mitochondrion {ECO:0000250|UniProtKB:Q0VBL6}. Note=In the nuclei of all periportal and perivenous hepatocytes. In the distal perivenous zone, detected in the cytoplasm of the hepatocytes. Shuttles between the nucleus and the cytoplasm in a CRM1-dependent manner. Colocalizes with BAD in the cytoplasm. Colocalizes with EPAS1 and HIF1A in the nucleus and speckles (By similarity). Localized in the cytoplasm and nuclei under normoxia, but increased in the nucleus under hypoxic conditions (PubMed:19694616). Colocalized with HIF1A in kidney tumors (PubMed:19694616). {ECO:0000250|UniProtKB:Q0VBL6, ECO:0000250|UniProtKB:Q9JHS2, ECO:0000269|PubMed:19694616}

**Tissue Location**

Expressed in vascular cells (at protein level) (PubMed:21069422). Expressed in kidney (PubMed:11573933, PubMed:19694616). Expressed in lung epithelial cells (PubMed:16775626) Expressed in endothelial cells (venous and arterial cells from umbilical cord and aortic endothelial cells) and in vascular smooth muscle cells

(aorta) (PubMed:21069422). Strongly expressed in the heart, placenta, and skeletal muscle, whereas a weak expression profile was found in the lung, liver, and kidney (PubMed:12538644). Expressed weakly in cell renal cell carcinoma (CC-RCC) compared to normal renal cells (PubMed:16126907). Expression is down-regulated in numerous kidney tumor cells compared to non tumor kidney tissues (PubMed:16126907). Isoform 2 is expressed in heart, placenta, lung, liver, skeletal muscle and pancreas and in numerous cancer cell lines (PubMed:20416395). Isoform 3 and isoform 4 are weakly expressed in heart, placenta, lung, liver, skeletal muscle and pancreas (PubMed:20416395). Isoform 4 is expressed in fetal tissues, such as heart, brain, thymus, lung, liver, skeletal kidney and spleen (PubMed:20416395). Isoform 3 is weakly expressed in fetal tissues, such as liver and kidney (PubMed:20416395).

### **HIF3A Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)