

HIF3A Antibody (N-Term)

Peptide-affinity purified goat antibody Catalog # AF3222a

Specification

HIF3A Antibody (N-Term) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW IHC, E <u>O9Y2N7</u> <u>NP_690007.1</u>, <u>NP_690008.2</u>, <u>64344</u>, <u>53417</u> (mouse), <u>64345 (rat)</u> Human Mouse, Rat Goat Polyclonal 0.5 mg/ml IgG 72433

HIF3A Antibody (N-Term) - 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

Dilution IHC~~1:100~500 E~~N/A

Format 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

HIF3A Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

HIF3A Antibody (N-Term) - Protein Information

Name HIF3A (HGNC:15825)

Synonyms BHLHE17, MOP7, PASD7



Function

Acts as a transcriptional regulator in adaptive response to low oxygen tension. Acts as a regulator of hypoxia-inducible gene expression (PubMed:11573933, PubMed:16126907, PubMed:19694616, PubMed:20416395, PubMed:21069422). 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 3 is weakly 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 (N-Term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HIF3A Antibody (N-Term) - Images





AF3222a-D2 (4 μ g/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

HIF3A Antibody (N-Term) - Background

This antibody is expected to recognize isoform a and c (NP_690007.1; NP_690008.2).

HIF3A Antibody (N-Term) - References

The human HIF (hypoxia-inducible factor)-3alpha gene is a HIF-1 target gene and may modulate hypoxic gene induction. Tanaka T, Wiesener M, Bernhardt W, Eckardt KU, Warnecke C, The Biochemical journal 2009 Nov 424 (1): 143-51. PMID: 19694616