

# HIF3 alpha Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58343

## Product Information

---

<b>Application</b>	WB, IHC-P, IHC-F, IF, ICC, E
<b>Primary Accession</b>	<a href="#">Q9Y2N7</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Predicted</b>	Pig, Dog, Horse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	72433
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human HIF3 alpha
<b>Epitope Specificity</b>	131-230/669
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Nucleus. Cytoplasm. Note=In the nuclei of all periportal and perivenous hepatocytes. In the distal perivenous zone, detected in the cytoplasm of the hepatocytes.
<b>SIMILARITY</b>	Contains 1 basic helix-loop-helix (bHLH) domain.Contains 2 PAS (PER-ARNT-SIM) domains.
<b>SUBUNIT</b>	Heterodimerizes with ARNT. Interacts via the oxygen-dependent degradation domain (ODD) with the beta domain of VHL.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	Hypoxia-inducible factor (HIF) is one of the most important factors in the cellular response to hypoxia, transcriptionally activating genes encoding proteins that mediate adaptive responses to reduced oxygen availability. HIF is a heterodimer consisting of one of three subunits, HIF1 alpha, HIF2 alpha, or HIF3 alpha. HIF target genes play critical roles in metabolism, angiogenesis, cell proliferation and cell survival. HIF3 alpha protein is 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. HIF3 alpha may be a marker for tumor growth and angiogenesis.

## Additional Information

---

<b>Gene ID</b>	64344
<b>Other Names</b>	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 ([HGNC:15825](#)), BHLHE17, MOP7, PASD7

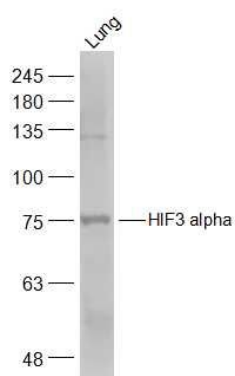
<b>Target/Specificity</b>	Expressed in kidney. Expressed abundantly in lung epithelial cells. Expression is regulated in an oxygen-dependent manner.
<b>Dilution</b>	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:50,IF=1:100-500,Flow-Cyt=1 µg/Test,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## Protein Information

---

<b>Name</b>	HIF3A ( <a href="#">HGNC:15825</a> )
<b>Synonyms</b>	BHLHE17, MOP7, PASD7
<b>Function</b>	Acts as a transcriptional regulator in adaptive response to low oxygen tension. Acts as a regulator of hypoxia-inducible gene expression (PubMed: <a href="#">11573933</a> , PubMed: <a href="#">16126907</a> , PubMed: <a href="#">19694616</a> , PubMed: <a href="#">20416395</a> , PubMed: <a href="#">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).
<b>Cellular Location</b>	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}
<b>Tissue Location</b>	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).

## Images



### Sample:

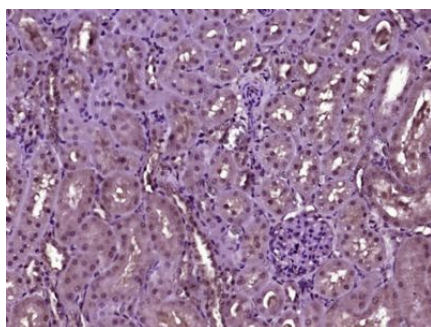
Lung (Mouse) Lysate at 40 ug

Primary: Anti-HIF3 alpha (AP58343) at 1/500 dilution

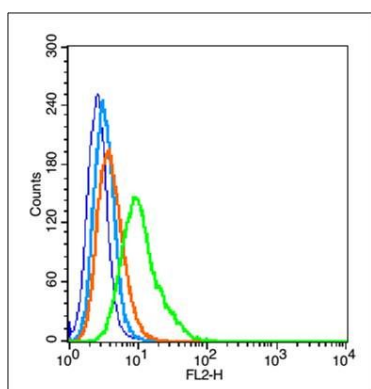
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 74 kD

Observed band size: 75 kD



Paraformaldehyde-fixed, paraffin embedded (Rat kidney);  
Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HIF3 alpha) Polyclonal Antibody, Unconjugated (AP58343) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): A549 (fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody (green line): Rabbit Anti-HIF3 alpha antibody (AP58343), dilution: 1 µg /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1 µg /test.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.