

Product datasheet for AP33233PU-N

OriGene Technologies, Inc.

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HIF3 alpha (HIF3A) (N-term) Goat Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, IHC

Recommended Dilution: Peptide ELISA: 1/128000 (Detection Limit).

Immunohistochemistry on Paraffin Sections: 4-6 µg/ml. In paraffin embedded Human

Kidney shows nuclear staining in some of the DCT.

Reactivity: Human Host: Goat

Clonality: Polyclonal

Immunogen: Synthetic peptide from the N-Terminus of Human HIF3A (NP_690007.1, NP_690008.2)

Specificity: This antibody is expected to recognize Isoform a and c of HIF3A (NP_690007.1, NP_690008.2).

Formulation: Tris saline, pH~7.3

State: Aff - Purified

State: Liquid purified IgG fraction

Stabilizer: 0.5% BSA

Preservative: 0.02% Sodium Azide

Concentration: lot specific

Purification: Ammonium Sulphate Precipitation followed by antigen Affinity Chromatography using the

immunizing peptide

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: hypoxia inducible factor 3 alpha subunit

Database Link: Entrez Gene 64344 Human

Q9Y2N7





Background:

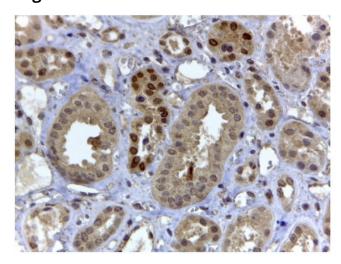
One of the most important factors in the cellular response to hypoxia is hypoxia-inducible factor (HIF), which transcriptionally activates genes encoding proteins that mediate adaptive responses to reduced oxygen availability. HIF is a heterodimer consisting of one of three subunits (HIF1-a, HIF2-a, or HIF3-a) bound to the aryl hydrocarbon receptor nuclear translocator (ARNT) that is also known as HIF1-b. HIF-a is a member of the basic helix-loophelix (bHLH) superfamily, in which the HLH domain mediates subunit dimerization while the basic domain binds to DNA. HIF target genes play critical roles in metabolism, angiogenesis, cell proliferation, and cell survival; in fact, HIF3-a may be a marker for tumor growth and angiogenesis . Examples of HIF target genes include VEGF, glucose transporter 1 (GLUT1), and EPO. HIF binds to the hypoxia-responsive element, which contains the core recognition sequence 5'-TACGTG-3', in the cis-regulatory regions of hypoxia-inducible genes.

Transcriptional activation by HIF is linked to its ability to recruit coactivator proteins such as CREB-binding protein (CBP), p300, steroid receptor coactivator-1, and translation initiation factor 2.

Synonyms:

HIF-3 alpha, Hypoxia-inducible factor 3 alpha, BHLHE17, MOP7, PASD7, Member of PAS protein 7, IPAS

Product images:



Paraffin Embedded Human Kidney stained with HIF3A / HIF3 alpha Antibody at 4 ug/ml. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.