**HIF1α**

**Polyclonal ANTIBODY**

Catalog Number: 20960-1-AP

**Basic Information**

- **Catalog Number:** 20960-1-AP
- **Size:** 48 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG15198
- **GenBank Accession Number:** BC012527
- **GeneID (NCBI):** 3091
- **Full Name:** hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)
- **Calculated MW:** 826aa, 93 kDa
- **Observed MW:** 120 kDa

**Recommended Dilutions:**

- **WB:** 1:200-1:1000
- **IP:** 0.5-4.0 μg for IP and 1:200-1:1000 for WB
- **IHC:** 1:50-1:500
- **IF:** 1:50-1:500

**Application Tested:**

- **FC, IF, IHC, IP, WB, ELISA**

**Species Specificity:**

- **human**

**Species Cited:**

- **human**

**Note:** IHC: suggested antigen retrieval with TE buffer pH 9.0. (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0.

**Background Information**

HIF1α, the major regulator of the cellular responses to hypoxia, consists of an oxygen-sensitive subunit, HIF1α (HIF1A), and an oxygen-insensitive subunit, HIF1β (arylhydrocarbon receptor nuclear transporter [ARNT]). Under normal oxygen conditions, HIF1α is continuously produced and destroyed, in a process involving hydroxylation, interaction with von Hippel-Lindau (VHL) protein, polyubiquitylation and subsequent proteasomal degradation. Under hypoxic conditions, hydroxylation is impaired and HIF1α is stabilized. HIF1α localizes in cytoplasm in normoxia, but it can translocate into nucleus in response to hypoxia. The calculated molecular weight of HIF1α is 93 kDa, but the modified protein HIF1α is about 110-120 kDa (PMID: 11698256, PMID: 7539918).

**Notable Publications**

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**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:

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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Immunofluorescent analysis of (-20°C Acetone) fixed Cobalt Chloride treated HeLa cells (left) and untreated cell (right) using 20960-1-AP (HIF1α antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Cobalt Chloride treated HeLa cells were subjected to SDS PAGE followed by western blot with 20960-1-AP (HIF1α Antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human thyroid cancer using 20960-1-AP (HIF1A antibody) at dilution of 1:50 (under 40X lens).

IP Result of anti-HIF1α (IP:20960-1-AP, 4ug; Detection:20960-1-AP 1:300) with HeLa cells lysate 4000ug.

1X10^6 HeLa cells were stained with 0.2ug HIF1a antibody (20960-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.