

Product datasheet for **AP23253PU-N**

HIF-1 alpha (HIF1A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, IP, WB
Recommended Dilution:	Western blot: At 1-2 µg/ml with the appropriate system to detect HIF-1α in cells and tissues. Immunohistochemistry on Paraffin Section: At 1-2 µg/ml to detect HIF-1α in formalin fixed and paraffin embedded tissues. Boiling the sections is required.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A peptide mapping at the N-terminus of HIF-1α of Human origin, different from the related Rat and Mouse sequences by two sequences.
Specificity:	This antibody detects HIF1A / HIF1 alpha.
Formulation:	50% Glycerol, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ State: Aff - Purified State: Lyophilized Ig fraction
Reconstitution Method:	1.2% Sodium Acetate or neutral PBS. If 0.5 ml of PBS is used, the antibody concentration will be 200 µg/ml.
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	hypoxia inducible factor 1 alpha subunit
Database Link:	<u>Entrez Gene 15251 Mouse</u> <u>Entrez Gene 29560 Rat</u> <u>Entrez Gene 3091 Human</u> <u>Q16665</u>



[View online »](#)

Background:

HIF-1 α (Hypoxia-inducible factor 1 α , HIF1A) is a transcription factor that mediates cellular and systemic homeostatic responses to reduced O₂ availability in mammals, including angiogenesis, erythropoiesis and glycolysis. This gene was mapped to 14q21-q24. HIF-1 α transactivates genes required for energy metabolism and tissue perfusion and is necessary for embryonic development and tumor explant growth. HIF-1 α is over expressed during carcinogenesis, myocardial infarction and wound healing. It is crucial for the cellular response to hypoxia and is frequently over expressed in human cancers, resulting in the activation of genes essential for cell survival. HIF-1 α regulates the survival and function in the inflammatory microenvironment directly. It is a transcription factor that plays a pivotal role in cellular adaptation to changes in oxygen availability.

Synonyms:

HIF-1 alpha, Hypoxia-inducible factor 1 alpha, ARNT-interacting protein, Member of PAS protein 1, Basic-helix-loop-helix-PAS protein MOP1, BHLHE78

Protein Families:

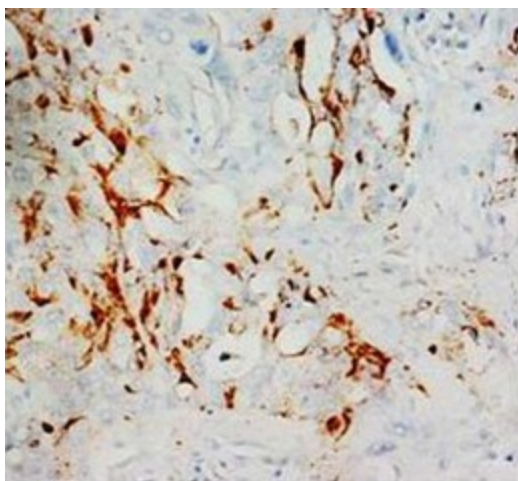
Transcription Factors

Protein Pathways:

mTOR signaling pathway, Pathways in cancer, Renal cell carcinoma

Product images:

Western blot analysis of rat brain tissue lysis using HIF-1 α antibody



Immunohistochemical analysis of paraffin embedded Mammary cancer sections, staining HIF-1alpha in cytoplasm, DAB chromogenic reaction