

Product datasheet for **TA319212**

HIF-1 alpha (HIF1A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1:5,000 - 1:20,000, WB: 1:500 - 1:2,000, IHC: User Optimized
Reactivity:	Human, Monkey, Mouse, Dog, Bovine, Xenopus, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region surrounding the P564 of human HIF-1a.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	hypoxia inducible factor 1 alpha subunit
Database Link:	NP_001230013 Entrez Gene 15251 Mouse Entrez Gene 29560 Rat Entrez Gene 480348 Dog Entrez Gene 704678 Monkey Entrez Gene 3091 Human Q16665
Synonyms:	bHLHe78; HIF-1-alpha; HIF-1A; HIF-1alpha; HIF1; HIF1-ALPHA; MOP1; PASD8
Note:	This antibody is suitable for Cancer, Immunology and Nuclear Signaling research. Tumor hypoxia often directly correlates with aggressive phenotype, metastasis progression and resistance to chemotherapy. HIF-1 transcription factors are dramatically induced in hypoxic areas and regulate the expression of genes necessary for tumor adaptation to conditions of low oxygen. The stabilization of HIF-1a by hypoxia is critically dependent upon the hydroxylation of certain Proline residues that exist in the oxygen-dependent degradation domain of HIF-1a. HIF factors are now considered an important therapeutic target for cancer intervention.

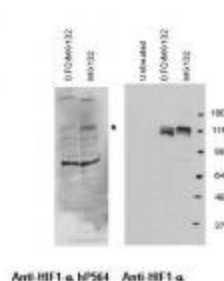


[View online »](#)

Protein Families: Transcription Factors

Protein Pathways: mTOR signaling pathway, Pathways in cancer, Renal cell carcinoma

Product images:



WB using anti-HIF-1 alphaHYDROXYP564 antibody shows detection (left panel) of hydroxylated HIF-1alpha in nuclear extracts of A549 cells treated with MG132 (a proteasome inhibitor). Hydroxyproline is not recognized on HIF-1alpha when cells are first treated with DFO, a prolyl hydroxylase inhibitor that prevents HIF hydroxylation. Control staining (right panel) using conventional anti-HIF-1alpha. The primary antibody was used at a 1:1,000 dilution in 2% BLOTTO.