



Polyclonal Anti-Hypoxia-inducible factor-1 α , *HIF-1 α* (Sephacrose Bead Conjugate)

Catalogue No. PA1041-S

Lot No. 02J01

Ig type: rabbit IgG

Size: 100 μ g/vial

Specificity

Human, mouse, rat. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP))

Immunogen

A synthetic peptide corresponding to a sequence mapping at the C-terminal of human HIF-1 α , identical to the related rat and mouse sequence.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN₃ preservative.

Storage

Store at 4°C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

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 transactivate 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.

REFERENCE

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3. Koshiji, M.; To, K. K.-W.; Hammer, S.; Kumamoto, K.; Harris, A. L.; Modrich, P.; Huang, L. E. : HIF-1-alpha induces genetic instability by transcriptionally downregulating MutS-alpha expression. *Molec. Cell* 17: 793-803, 2005.
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