

PRODUCT INFORMATION



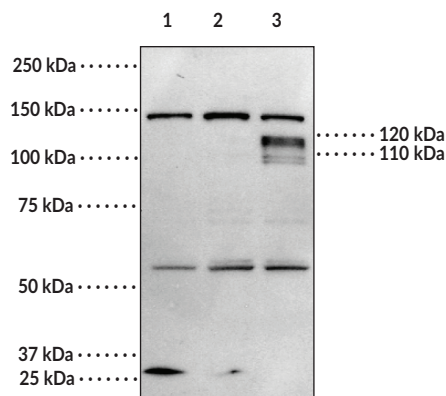
HIF-1 α (C-Term) Polyclonal Antibody

Item No. 10006421

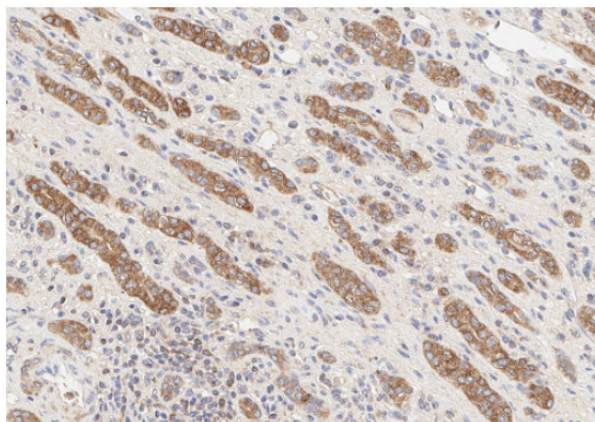
Overview and Properties

Contents: This vial contains 500 μ l of peptide affinity-purified polyclonal antibody.
Synonyms: ARNT-interacting Protein, Hypoxia-Inducible Factor 1 α
Immunogen: Peptide from the C-terminal region of human HIF-1 α
Species Reactivity: (+) Human, mouse, and simian; other species not tested
Uniprot No.: Q16665
Form: Liquid
Storage: -20°C (as supplied)
Stability: \geq 3 years
Storage Buffer: PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Host: Rabbit
Applications: Immunohistochemistry (IHC) and Western blot (WB)*; the recommended starting dilution for IHC is 1:40 and 1:200 for WB for 1 hour incubation at room temperature when probing total cell lysates. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.
**6-8 % acrylamide gels (SDS-PAGE) are recommended for loading gels with HIF-1 α containing samples to allow maximal separation of high molecular weight proteins with similar M_r .*

Images



Lane 1: Cos cell lysate (30 μ g)
Lane 2: Cos cell lysate (40 μ g)
Lane 3: CoCl₂ treated Cos cell lysate (30 μ g)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human kidney tissue after heat induced antigen retrieval in pH, 6.0 citrate buffer. After incubation with HIF-1 α (C-Term) Polyclonal Antibody (Item No. 10006421), at a 1:40 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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Description

Hypoxia-Inducible Factor 1 α (HIF-1 α) is a transcription factor that accumulates under low-oxygen conditions.^{1,2} Following hypoxic stimulus and cytoplasmic accumulation, HIF-1 α migrates to the nucleus where, with other transcription factors, it drives the production of stress-adaptive proteins. This response is essential for maintenance of normal oxidative physiology, however overexpression in cancer cells promotes tumor survival.²⁻⁶ HIF-1 α is an endothelial PAS domain protein 1 (EPAS-1) family member with phosphorylation dependent activities. HIF-1 α will migrate to the apparent molecular weights of 110-125 kDa (by SDS-PAGE) depending on phosphorylation status.^{7,8} This vial contains peptide affinity-purified IgG directed against the C-terminus of HIF-1 α . The antibody should be stored at -20°C as supplied. Positive controls include human, primate, and mouse cell cultures grown in hypoxic conditions or treated with prolyl hydroxylase inhibitors such as DMOG (Item No. 71210), 2,4-DPD (Item No. 71200), desferrioxamine, or cobalt chloride.^{6,9}

References

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