

Rabbit anti HIF, alpha Polyclonal Antibody

Alternative Name(s): hypoxia inducible factor 1, alpha subunit; HIF1A

Order Information

Description: HIF, alpha
Catalogue: 602-510
Lot: See label
Size: 100ug/200ul
Host: Rabbit
Clone: nan

• Application: IHC(P), WB • Reactivity: Ms, Rt, Hu

ANTIGEN PREPARATION

A twenty-one amino acids synthetic peptide corresponding to the internal sequence of HIF alpha protein. This sequence is identical to human, rat and mouse origins.

BACKGROUND

The hypoxia-inducible transcription factor 1 alpha (HIF-1 alpha) contributes significantly to the pathophysiology of major categories of human disease, including myocardial and cerebral ischemia, cancer, pulmonary hypertension, congenital heart disease and chronic obstructive pulmonary disease. HIF-1 is a transcription factor involved in mammalian oxygen homeostasis., HIF-1 is a heterodimer composed of HIF-1 alpha/beta subunits which binds to hypoxia-response elements (HREs) in the promoters of many genes involved in the adaptation to an environment of insufficient oxygen or hypoxia. Under hypoxic conditions, the lack of hydroxylation prevents HIF degradation, and increase transcriptional activity. Therefore, the concentration of HIF-1 alpha increases in the hypoxic cells. In contrast, HIF-1 beta remains stable under either condition.

PURIFICATION

The Rabbit IgG is purified by Epitope Affinity Purification

FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antibody recognizes ~97 kDa of HIF-1 alpha protein. It reacts with human, mouse and rat. The other species are not tested.

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at –20oC to –70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

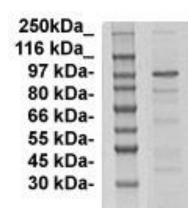
APPLICATIONS/SUGGESTED WORKING DILUTIONS*

- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 μg/ml
- Immunoprecipitation: 2-5 μg/ml
- IHC: 2-10 µg/ml
- · Flow cytometry: Not tested
- Molecular Weight: 97.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

^{*}Optimal dilutions should be determined by researchers for the specific applications.







Western Blot: The tissue lysate derived from hypoxic rat brain was resolved onto 10% SDS-PAGE, transferred onto NC membrane, and immuno-blotted by Rabbit anti HIF-1alpha (Cat#602-510) at 1:500. A major immune-reactive band around ~95 kDa was observed.

REFERENCES