

# HIF-1α Monoclonal Antibody

# ORDERING INFORMATION

Catalog No.: 34039 (clone ESEE122)

Format: 100ug in PBS, pH 7.4; 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity

chromatography.

## **BACKGROUND**

Hypoxia-inducible factor 1 (HIF-1) is a heterodimeric transcription factor that regulates the transcription of a broad range of genes that facilitate responses to hypoxia including genes that regulate angiogenesis, erythropoiesis, cell cycle, metabolism, and apoptosis. HIF-1 is comprised of two subunits, HIF-1 $\alpha$  and HIF-1 $\beta$ . The widely expressed HIF-1 $\alpha$  is degraded rapidly in normoxic cells by the ubiquitin/proteasomal pathway. HIF-1 $\alpha$  is proline hydroxylated leading to a conformational change that promotes binding to the von Hippel Lindau protein (VLH)-E3 ligase complex; ubiquitination and proteasomal degradation follows.

## SPECIFICATION SUMMARY

**Antigen:** Recombinant protein corresponding to aa 329-530 of human HIF-1α.

Accession no.: Q61221, NP\_034561.2

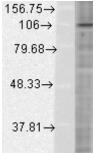
**Host Species:** Mouse **Antibody Class:** IgG1

**Specificity:** This antibody recognizes human, mouse, rat, and bovine HIF-1α.

#### **APPLICATIONS**

Immunoblotting: use at 2ug/ml. Predicted molecular weight ~116kDa.

This is a recommended concentration. Endusers should determine optimal concentrations for their applications.



Detection of HIF-1 $\alpha$  in HeLa cell lysate.

#### **DILUTION INSTRUCTIONS**

Dilute in PBS or medium that is identical to that used in the assay system.

## STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Store in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not intended for use in therapeutic or diagnostic procedures.