

HIF1-alpha Rabbit Recombinant Oligoclonal Antibody – Purified

Catalog no. 710059

(See product label for lot information)



Clone/PAD: 16HCLC
Isotype: IgG
Gene ID: 3091
Protein Acc. no.: Q16665
Qty: 100 µg
Volume: 200 µl
Concentration: 0.5 mg/mL

Formulation

Phosphate buffered saline (PBS) with 0.09% sodium azide.

Application

For use in Western Blotting and ELISA.

Reactivity

This antibody is specific for human HIF1-alpha.

Immunogen

Peptide

Immunogen sequence

EDTEAKNPFSTQ

Sequence Identity

Human

Sequence Homology

Mouse

Expected Reactivity

Based on sequence identity and similarity, reactivity to Human and Mouse are predicted.

Storage

2-8°C for up to 1 month, -20°C for long term storage. Avoid repeated freezing and thawing.

Expiration Date

Expires one year from date of receipt when stored as instructed.

Background

HIF1-alpha (Hypoxia-inducible factor 1, alpha), a subunit HIF1, which is a transcription factor found in mammalian cells cultured under reduced oxygen tension (1). HIF1 functions as a transcriptional regulator of the adaptive response to hypoxia. HIF1-alpha regulates hypoxia-mediated apoptosis, cell proliferation and tumour angiogenesis (2). Hypoxia which induces p53 protein accumulation, directly interacts with HIF1-alpha and reduces hypoxia-induced expression of HIF1-alpha by promoting MDM2-mediated ubiquitination and proteasomal degradation under hypoxic conditions (3-4). Recent studies suggests that induction of NOX4 by HIF1-alpha contributes to maintain ROS levels after hypoxia and hypoxia-induced proliferation (5). In humans, it is located on the q arm of chromosome 14 (6).

References

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3. Chen D, Li M, Luo J, Gu W. (2003). Direct interactions between HIF-1 alpha and Mdm2 modulate p53 function. *The Journal of Biological chemistry*, 278(16):13595-8.
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5. Diebold I, Petry A, Hess J, Görlach A. (2010). The NADPH oxidase subunit NOX4 is a new target gene of the hypoxia-inducible factor-1. *Molecular Biology of the Cell*, 21(12):2087-96.
6. Semenza GL, Rue EA, Iyer NV, Pang MG, Kearns WG. (1996). Assignment of the hypoxia-inducible factor 1alpha gene to a region of conserved synteny on mouse chromosome 12 and human chromosome 14q. *Genomics*, 34(3):437-9.

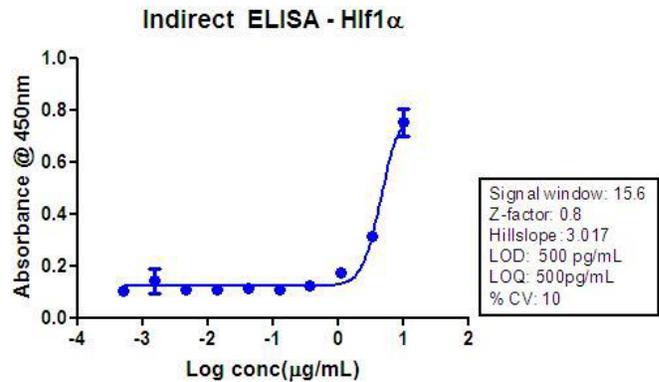
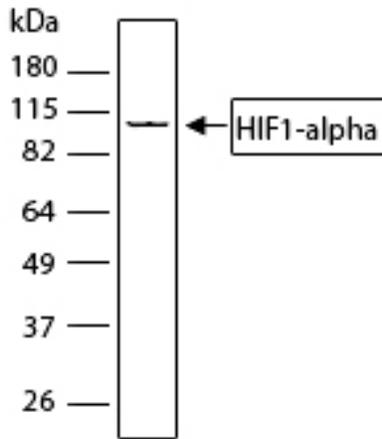
Applications:

	Species	Test Material	Concentration
Western Blotting	Human	HEK	1 - 5 µg/ml
Indirect ELISA	Human	HEK	5x10 ⁻⁴ – 10 µg/ml

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Western Blot analysis of HIF1-alpha Rabbit Recombinant Oligoclonal Antibody (Cat. No.710059).

Whole cell extract; 30µg per lane from HEK was loaded on SDS-PAGE followed by transfer on to nitrocellulose. The blot was blocked followed by incubation with HIF1-alpha Rabbit Recombinant Oligoclonal Antibody at 1µg/mL for 2 hours. Goat Anti Rabbit, HRP conjugated was used at 1:5000 dilution as secondary antibody and developed by chemiluminescence (ECL) method. Expected size is ~93kDa.

Indirect ELISA of Hif1-alpha Rabbit Recombinant Oligoclonal Antibody (Cat. No.710059).

Indirect ELISA was done using HIF1-alpha Rabbit Recombinant Oligoclonal Antibody to detect HIF1-alpha Rabbit Recombinant Oligoclonal Antibody on HEK293 cell lysate (300 ng/well) using TMB (Cat. No. SB01) as substrate.

Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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