

# Anti-HIF-1 alpha Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

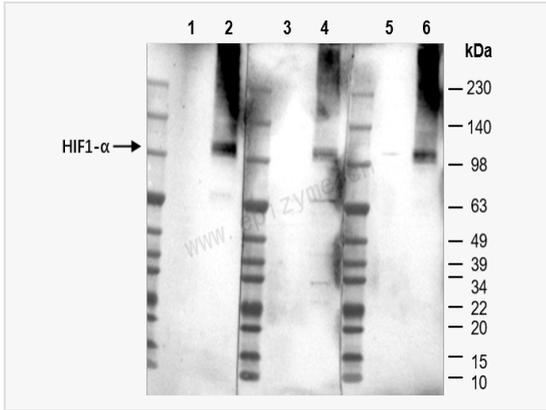
Catalog # R015076

## Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	39H77C67
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human HIF-1-alpha
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-HIF-1 alpha Rabbit mAb [39H77C67] is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Synonyms	ARNT interacting protein, ARNT-interacting protein, Basic helix loop helix PAS protein MOP1, Basic-helix-loop-helix-PAS protein MOP1, bHLHe78, Class E basic helix-loop-helix protein 78, HIF 1A, HIF 1alpha, HIF-1-alpha, HIF-1alpha, HIF-alpha, HIF1 A, HIF1 Alpha, HIF1, HIF1-alpha, HIF1A, HIF1A_HUMAN, hifla, Hypoxia inducible factor 1 alpha, Hypoxia inducible factor 1 alpha isoform I.3, Hypoxia inducible factor 1 alpha subunit, Hypoxia inducible factor 1 alpha subunit basic helix loop helix transcription factor, Hypoxia inducible factor 1, alpha subunit (basic helix loop helix transcription factor), Hypoxia inducible factor 1alpha, Hypoxia-inducible factor 1-alpha, Member of PAS protein 1, Member of PAS superfamily 1, Member of the PAS Superfamily 1, MOP 1, MOP1, PAS domain-containing protein 8, PASD 8, PASD8.
Calculated MW	Calculated MW: 92 kDa; Observed MW: 110 kDa
Uniprot ID	Q16665
Gene ID	3091
Background	This gene encodes the alpha subunit of transcription factor hypoxia-inducible factor-1 (HIF-1), which is a heterodimer composed of an alpha and a beta subunit. HIF-1 functions as a master regulator of cellular and systemic homeostatic response to hypoxia by activating transcription of many genes, including those involved in energy metabolism, angiogenesis, apoptosis, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia. HIF-1 thus plays an essential role in embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jul 2011]
Cellular Location	Cytoplasm. Nucleus. Cytoplasmic in normoxia, nuclear translocation in response to hypoxia. Colocalizes with SUMO1 in the nucleus. under hvnoxia.



Western Blot - Anti-HIF-1 alpha Rabbit mAb [39H77C67]

All lanes: R015076 at 1:2,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HeLa treated with 0.5mM CoCl<sub>2</sub> for 24h whole cell lysates

Lane 3: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 4: A431 treated with 0.5mM CoCl<sub>2</sub> for 24h whole cell lysates

Lane 5: Replicated experiment of Lane 1

Lane 6: Replicated experiment of Lane 2

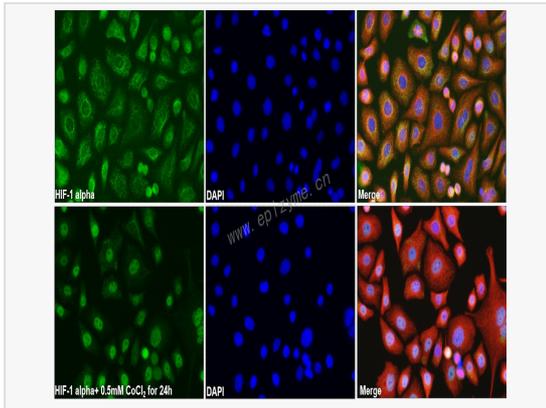
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 92 kDa

Observed band size: 110 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-HIF-1 alpha Rabbit mAb [39H77C67]

Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

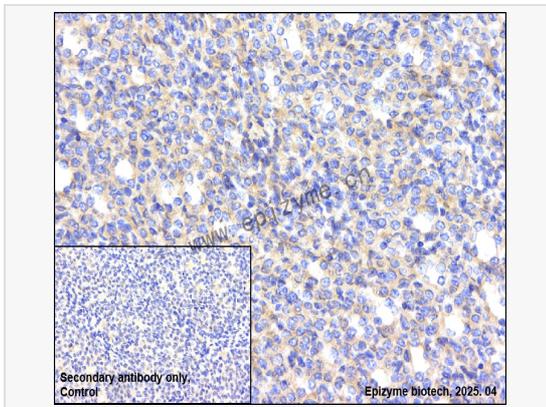
Primary antibodies: R015076 at 1:100 dilution and α-tubulin Mouse Monoclonal

Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and

Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-HIF-1 alpha Rabbit mAb [39H77C67]

Sample: Paraformaldehyde-fixed, paraffin embedded rat kidney tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015076 at 1:200 dilution

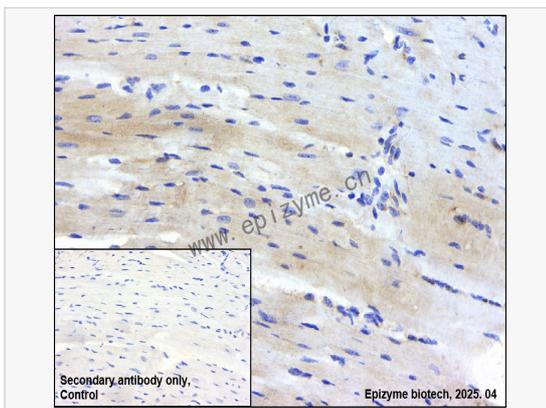
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-HIF-1 alpha Rabbit mAb [39H77C67]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse heart tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R015076 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.