Anti-HIF-1 alpha Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R015076

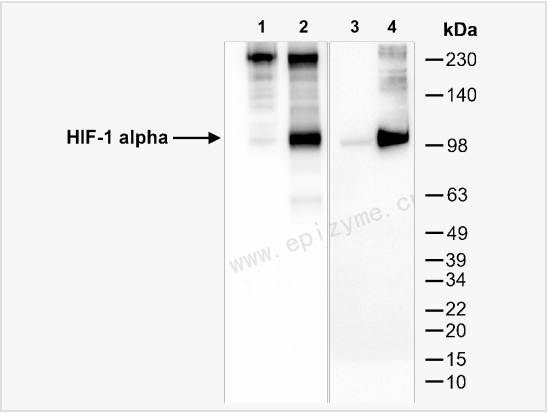
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; 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.

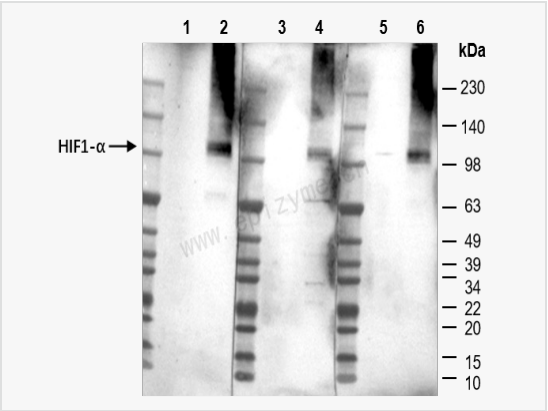
Protein Information

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 factor1alpha, 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 hypoxia.

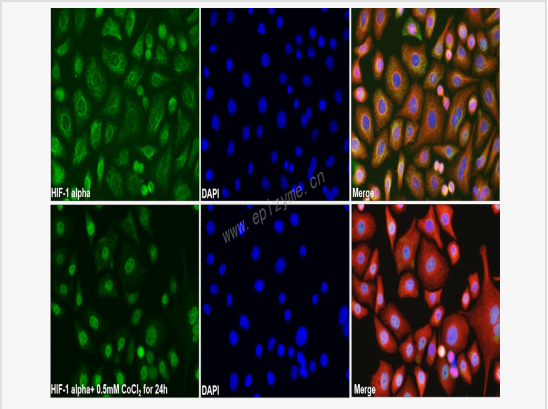
Validation Images



Western Blot - Anti-HIF-1 alpha Rabbit mAb [39H77C67]
All lanes: R015076 at 1:2,000 dilution
Lane 1 : PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates
Lane 2 : PC-12 treated with 0.5mM CoCl2 for 24h whole cell lysates
Lane 3 : Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 4 : Raw264.7 treated with 0.5mM CoCl2 for 24h whole cell lysates
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).



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 CoCl2 for 24h whole cell lysates
Lane 3: A431 (Human epidermoid teratoma cell line) whole cell lysates
Lane 4: A431 treated with 0.5mM CoCl2 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).