

HIF1A Monoclonal Antibody (mgc3)

Product Details

Size	100 µL
Species Reactivity	Bovine, Human, Mouse, Non-human primate, Pig
Published Species	Rabbit, Rat, Bovine, Human, Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	mgc3
Conjugate	Unconjugated
Immunogen	Human HIF-1 alpha amino acids 530-826.
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4, with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_325431

Applications	Tested Dilution	Publications
Western Blot (WB)	1:2,000	17 Publications
Immunohistochemistry (IHC)	-	7 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:10-1:100	-
Immunocytochemistry (ICC/IF)	1:20-1:200	3 Publications
Flow Cytometry (Flow)	-	1 Publication
Immunoprecipitation (IP)	Assay-dependent	-
Neutralization (Neu)	-	1 Publication
Gel Shift (GS)	Assay-dependent	1 Publication
Immunoelectrophoresis (IE)	Assay-dependent	-

Product Specific Information

MA1-516 detects hypoxia-inducible factor 1 alpha (HIF-1 alpha) from human, non-human primate, bovine, mouse and porcine cells. This antibody does not cross-react with ARNT or the related HIF-2 alpha.

MA1-516 has been successfully used in Western blot, immunofluorescence, immunoprecipitation, immunocytochemistry, and gel shift procedures. By Western blot, this antibody detects an ~116 kDa protein representing HIF-1 alpha after hypoxic induction in COS cells. Immunofluorescence staining of HIF-1 alpha in COS-7 cells with MA1-516 yields nuclear staining after exposing cells to 1% oxygen for 4 hours. In gel shift assays, MA1-516 has been successfully used only with mouse HIF-1 alpha.

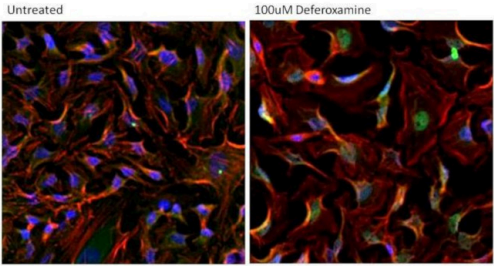
Antibodies to this protein (and modification) were previously sold as part of a Thermo Scientific Cellomics High Content Screening Kit. This replacement antibody is now recommended for researchers who need an antibody for high content cell based assays. It has been thoroughly tested and validated for cellular immunofluorescence (IF) applications. Further

optimization including the selection of the most appropriate fluorescent Dylight conjugated secondary antibody may have to be performed for your high content assay.

Product Images For HIF1A Monoclonal Antibody (mgc3)

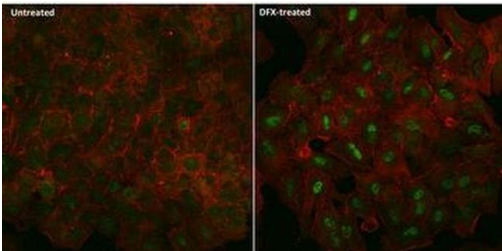
HIF1A Antibody (MA1-516) in ICC/IF

Immunofluorescent analysis of HIF-1 alpha (green) in HeLa cells either left untreated (left panel) or treated with 100uM Deferoxamine mesylate for ~16 hours (right panel). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 15 minutes at room temperature and blocked with 0.3% BSA for 15 minutes at room temperature. Cells were probed with a HIF-1 alpha monoclonal antibody (Product # MA1-516) at a dilution of 1:100 for at least 1 hour at room temperature, washed with PBS, and incubated with a DyLight 488-conjugated goat anti-mouse IgG secondary antibody (Product # 35502) at a dilution of 1:500 for 30 minutes at room temperature. F-actin (red) was stained with DyLight 594 Phalloidin (Product # 21836) and nuclei (blue) were stained with Hoechst 33342 dye (Product # 62249). Images were taken on a Thermo Scientific ArrayScan Instrument at 20X magnification.



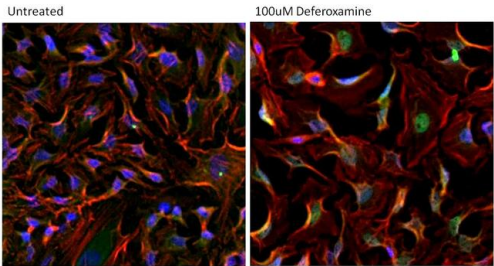
HIF1A Antibody (MA1-516)

The specificity of anti-HIF1-alpha antibody (Product # MA1-516) was demonstrated by the immunofluorescence detection of increased accumulation of HIF1-alpha in the nucleus in A549 cells upon treatment with deferoxamine mesylate (right panel) compared to untreated cells (left panel). {TM}



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Western Blot (17)

Life (Basel, Switzerland)	Year 2023
Low-Level Laser Therapy Induces Melanoma Tumor Growth by Promoting Angiogenesis.	Species Mouse
"MA1-516 was used in Western Blotting to indicate that LLLT induces melanoma tumor growth by promoting angiogenesis."	
Authors: Lin YY, Lee SY, Cheng YJ	
Oncology reports	Year 2023
Activating transcription factor 4 regulates hypoxia inducible factor 1 in chronic hypoxia in pancreatic cancer cells.	Species Human
"Published figure using HIF1A monoclonal antibody (Product # MA1-516) in Western Blot"	Dilution 1:1000
Authors: Chee NT, Carriere CH, Miller Z, Welford S, Brothers SP	

[View more WB references on thermofisher.cn](#)

Immunohistochemistry (7)

Frontiers in immunology	Year 2022
IL-17 Induces Autophagy Dysfunction to Promote Inflammatory Cell Death and Fibrosis in Keloid Fibroblasts <i>via</i> the STAT3 and HIF-1 Dependent Signaling Pathways.	
"Published figure using HIF1A monoclonal antibody (Product # MA1-516) in Immunohistochemistry"	
Authors: Lee SY, Lee AR, Choi JW, Lee CR, Cho KH, Lee JH, Cho ML	
Frontiers in oncology	Year 2020
An Integrated Score and Nomogram Combining Clinical and Immunohistochemistry Factors to Predict High ISUP Grade Clear Cell Renal Cell Carcinoma.	Species Human
"MA1-516 was used in Immunohistochemistry to combine clinical and immunohistochemical factors for the prediction of high ISUP grade clear cell renal cell carcinoma in an attempt to improve the accuracy of a biopsy-based diagnosis."	
Authors: Wu J, Xu WH, Wei Y, Qu YY, Zhang HL, Ye DW	

[View more IHC references on thermofisher.cn](#)

More applications with references on thermofisher.cn

- ICC/IF (3)
- Flow (1)
- Neu (1)
- GS (1)

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