diagenode
A Hologic Company

TECHNICAL DATASHEET

HIF1 alpha polyclonal antibody

Cat. No. C15410234-100

Type: Polyclonal	Specificity: Human, mouse, rat, cow: positive. Other species: not tested.
Size: 100 µl	Isotype: NA
Concentration: 0.26 µg/µl	Host: Rabbit
Lot No.: 42760	Purity: Affinity purified polyclonal antibody
Storage buffer: PBS containing 1% BSA, 20% Glycerol and 0.025% ProClin 300.	Storage conditions: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.	

Last Data Sheet Update: March 15, 2019

Description

Polyclonal antibody raised in rabbit against HIF1 alpha (hypoxia inducible factor 1, alpha subunit), using a recombinant protein.

Applications

Applications	Suggested dilution *	References
ChIP	5 µg per ChIP	Fig 1
Western blotting	1:1,000	Fig 2, 3
Immunoprecipitation	5 µg per IP	Fig 4
Immunofluorescence	1:500	Fig 5
Immunohistochemistry	1:500	Fig 6

* Optimal dilutions/concentrations should be determined by the researcher.

Target Description

HIF1 alpha (UniProt/Swiss-Prot entry Q16665) is the alpha subunit of the transcription factor HIF1 (hypoxia-inducible factor-1). HIF1 activates the transcription of many genes involved in energy metabolism, angiogenesis, apoptosis, and other genes whose protein products increase oxygen delivery or facilitate metabolic adaptation to hypoxia under hypoxic conditions. As such HIF1 regulates the adaptive response to hypoxia and is essential for embryonic vascularization, tumor angiogenesis and pathophysiology of ischemic disease.

Diagenode sa. BELIGUM | EUROPE
LIEGE SCIENCE PARK
Rue Bois Saint-Jean, 3
4102 Seraing (Ougrée) - Belgium
Tel: +32 4 364 20 50
Fax: +32 4 364 20 51
info@diagenode.com | orders@diagenode.com

Diagenode Inc. USA | NORTH AMERICA
400 Morris Avenue, Suite 101
Denville, NJ 07834 - USA
Tel: +1 862 209-4680
Fax: +1 862 209-4681
info.na@diagenode.com | orders.na@diagenode.com

Validation data

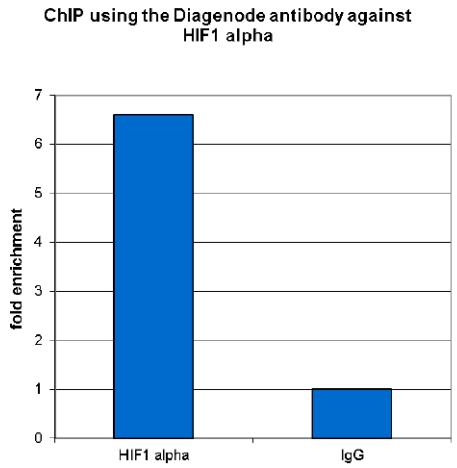


Figure 1. ChIP results obtained with the Diagenode antibody directed against HIF1 alpha

ChIP assays were performed using HepG2 cells and 5 µg of the Diagenode antibody against HIF1 alpha (Cat. No. C15410234). An equal amount of IgG was used as a negative IP control. QPCR was performed with primers specific for the VEGF promoter. Figure 1 shows the fold enrichment over the IgG negative control.

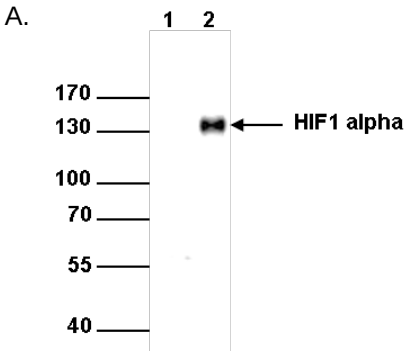
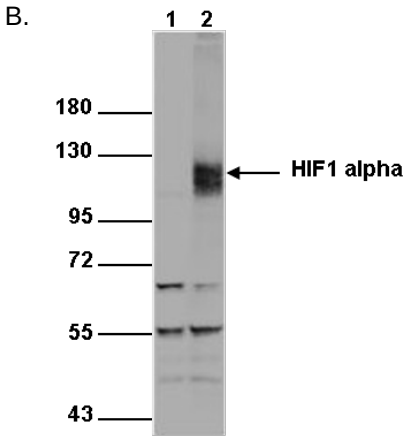


Figure 2. Western blot analysis using the Diagenode antibody directed against HIF1 alpha

Whole cell extracts (30 µg) from either HeLa (figure 2A) or NIH3T3 cells (figure 2B) were analysed by Western blot using the Diagenode antibody against HIF1 alpha (Cat. No. C15410234) diluted 1:1,000. Lane 2 represents extracts from cells treated with CoCl2 for 24 hours, lane 1 shows the result for untreated cells. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.



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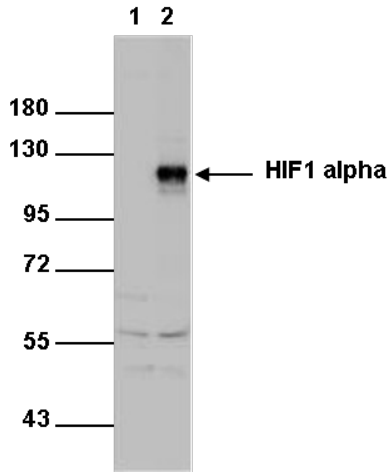

Figure 3. Western blot analysis using the Diagenode antibody directed against HIF1 alpha

Whole cell extracts (30 µg) from MCF7 cells treated with CoCl2 for 24 hours were analysed by Western blot using the Diagenode antibody against HIF1 alpha (Cat. No. C15410234) diluted 1:1,000. Lane 1 shows the result of cells transfected with HIF1 alpha shRNA, whereas the result obtained with untransfected control cells is shown in lane 2. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.

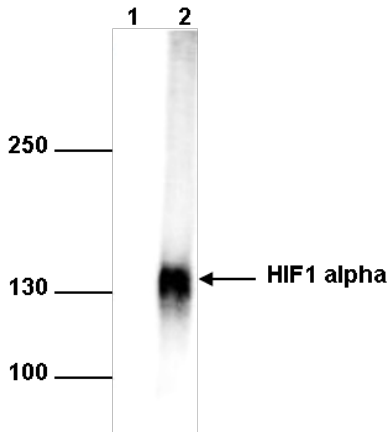

Figure 4. Immunoprecipitation using the Diagenode antibody directed against HIF1 alpha

Immunoprecipitation was performed on whole cell extracts from HepG2 cells, treated with CoCl2 for 24 hours, using 5 µg of the Diagenode antibody against HIF1 alpha (Cat. No. C15410234, lane 2). An equal amount of rabbit IgG was used as a negative control (lane 1). The immunoprecipitated HIF1 alpha protein was detected by western blot with the HIF1 alpha antibody diluted 1:1,000.

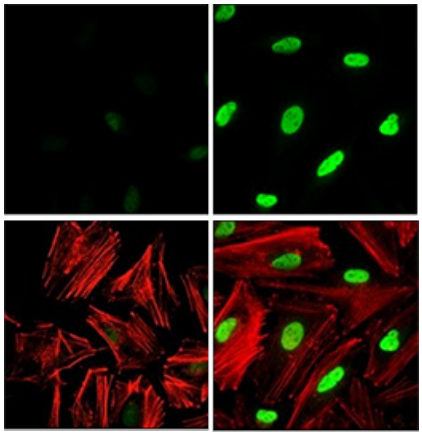

Figure 5. Immunofluorescence with the Diagenode antibody directed against HIF1 alpha

HeLa cells treated with CoCl2 for 24 hours (right) and untreated HeLa cells (left) were fixed with 4% formaldehyde for 15' at room temperature and stained with the Diagenode antibody against HIF1 alpha (Cat. C15410234) diluted 1:500 (green). The bottom panel shows costaining with phalloidin, a cytoskeleton marker (red).

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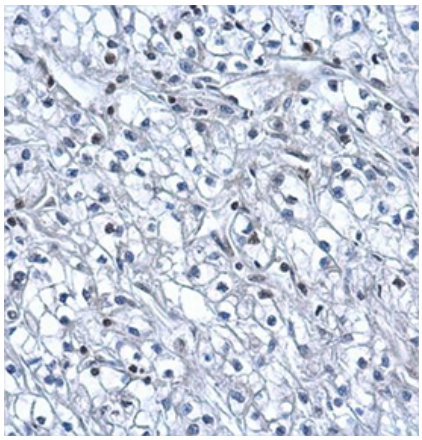

Figure 6. Immunohistochemistry using the Diagenode antibody directed against HIF1 alpha

Formalin fixed paraffin embedded human kidney cancer cells were stained with the Diagenode antibody against HIF1 alpha (Cat. No. C15410234) diluted 1:500, followed by a peroxidase labelled goat anti-rabbit secondary antibody.

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