

Product Datasheet

HIF-1 alpha Antibody Pack

NB100-905

Unit Size: 7 Vials

Store at 4C. Do not freeze.

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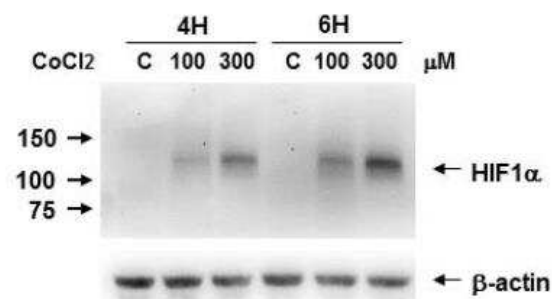
NB100-905**HIF-1 alpha Antibody Pack**

Product Information	
Unit Size	7 Vials
Concentration	Concentration of individual antibodies may be found on the vial label. If unlisted please contact technical services.
Storage	Store at 4C. Do not freeze.
Product Description	
Description	This pack contains 1 vial each of: NB100-654SS (0.025 mL), NB100-479SS (0.025 mL), NB100-449SS (0.025 mL), NB100-105 (0.05 mL) and NB100-131 (0.05 mL).
Gene ID	3091
Gene Symbol	HIF1A
Species	Human, Mouse, Rat, Canine
Reactivity Notes	See individual datasheets of components for their validated species
Specificity/Sensitivity	These antibodies are specific for HIF-1alpha.
Immunogen	For NB 100-654: Human HIF-1 alpha amino acids 432-528. For NB 100-105: Human HIF-1 alpha amino acids 432-528. For NB 100-131: Human HIF-1 alpha amino acids 329-530. For NB 100-449: Human HIF-1 alpha amino acids 775-826. For NB 100-479: Antibody was developed against a fusion protein including amino acids 530 - 825 of the mouse HIF-1 alpha protein [Uniprot# Q61221].
Kit Components	NB100-105: HIF-1 alpha Antibody (H1alpha67), NB100-654: HIF-1 alpha Antibody - BSA Free, HAF007: Goat anti-Mouse IgG Secondary Antibody [HRP], HAF008: Goat anti-Rabbit IgG Secondary Antibody [HRP], NB100-479: HIF-1 alpha Antibody - BSA Free, NB100-449: HIF-1 alpha Antibody, NB100-131: HIF-1 alpha Antibody (ESEE122) - BSA Free
Product Application Details	
Applications	Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot, Simple Western, Flow Cytometry, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Immunohistochemistry-Paraffin, Immunohistochemistry-Frozen
Application Notes	See individual datasheets of components for their validated applications. Western Blot: A starting dilution of 1:1,000 is recommended with titration up or down depending upon the signal and background. Immunohistochemistry: Both positive and negative feedback have been provided on all antibodies included in this pack. A starting dilution of 1:250 is recommended with titration up or down depending upon the signal and background.

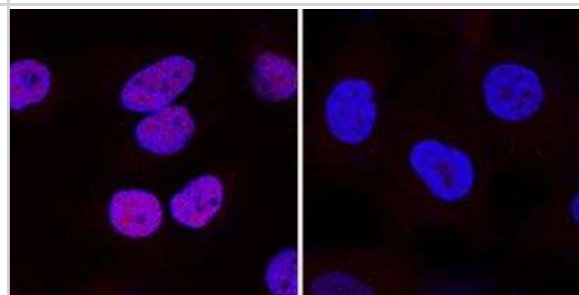


Images

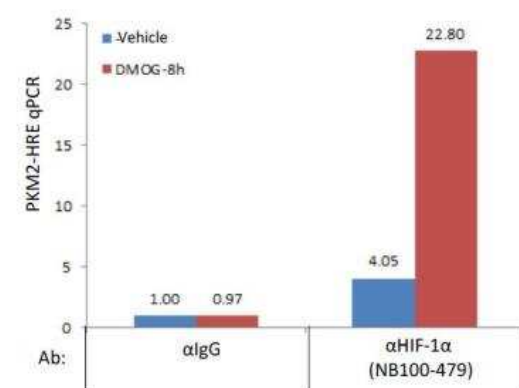
Western Blot: HIF-1 alpha Antibody Pack [NB100-905] - HIF-1 alpha induction by CoCl₂ on Caki-1 cell lysate. Image from verified customer review. HIF-1 alpha Antibody (H1alpha67) [NB100-105]



Immunocytochemistry/ Immunofluorescence: HIF-1 alpha Antibody Pack [NB100-905] - HIF-1 alpha was detected in immersion fixed DFO treated Hela cells (left) but was not detected in HIF-1 knockout HeLa cells (right) using Mouse Anti-human HIF-1 alpha monoclonal antibody (Catalog #NB100-105) at 25 ug/mL for 3 hours at room temperature. Cells were stained using a NorthernLights (TM) 557-conjugated Donkey Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. HIF-1 alpha Antibody (H1alpha67) [NB100-105]



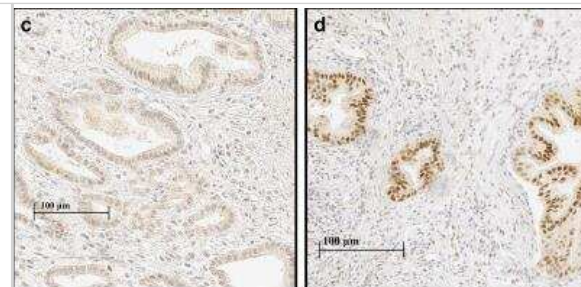
Chromatin Immunoprecipitation: HIF-1 alpha Antibody Pack [NB100-905] - ChIP-qPCR assay of HIF-1 binding to hypoxia response element (HRE) of the PKM2 gene in human MDA-MB-231 breast cancer cells treated with vehicle or DMOG (HIF inducer) for 8 hours. Negative control: immunoprecipitation was performed with IgG. Image courtesy of Gregg Semenza, Johns Hopkins University School of Medicine. HIF-1 alpha Antibody [NB100-479]



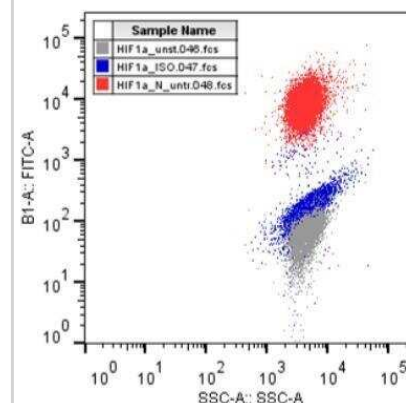
Simple Western: HIF-1 alpha Antibody Pack [NB100-905] - Simple Western lane view shows a specific band for HIF-1 alpha in 0.5 mg/ml of hypoxic HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. HIF-1 alpha Antibody [NB100-449]



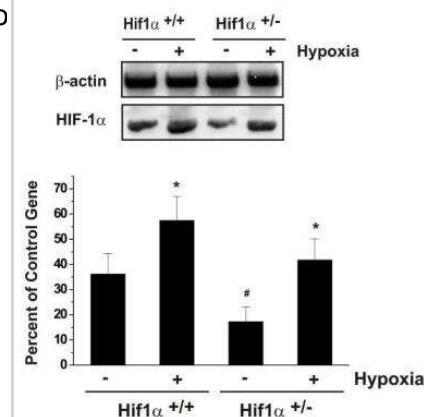
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-905] - HIF-1alpha expression in PDAC and adjacent normal pancreatic tissue. PDAC with weak (intensity 1) nuclear and cytoplasmic HIF-1alpha staining (left). PDAC with strong (intensity 3) nuclear and moderate (intensity 2) cytoplasmic HIF-1alpha staining (right). Image collected and cropped by CiteAb from the following publication (<http://wjso.biomedcentral.com/articles/10.1186/s12957-018-1432-4>), licensed under a CC-BY license. HIF-1 alpha Antibody (H1alpha67) [NB100-105]



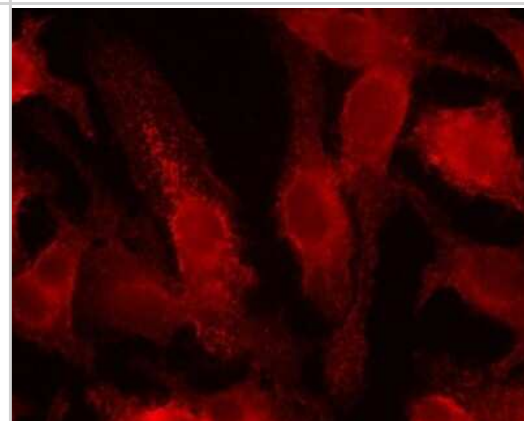
Flow Cytometry: HIF-1 alpha Antibody Pack [NB100-905] - Analysis using the Alexa Fluor (R) 488 conjugate of NB100-105. Staining of HIF-1 alpha in multiple myeloma cells: H929 cells (0.5×10^6) were stained with Alexa Fluor 488 (R) conjugated HIF-1 alpha antibody (NB100-105AF488). Image courtesy of Dr. Barbara Muz at Washington University in St. Louis School of Medicine. HIF-1 alpha Antibody (H1alpha67) [NB100-105]



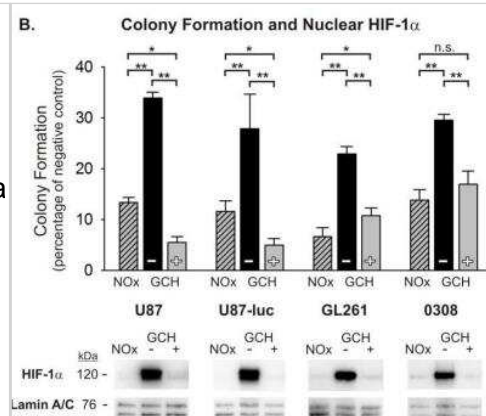
Western Blot: HIF-1 alpha Antibody Pack [NB100-905] - Effects of in vitro hypoxia on the expression of mouse HIF-1 alpha in HIF-1 alpha^{+/-} and HIF-1 alpha^{+/+} astrocytes. Confluent astrocyte monolayers of both cell types were exposed to a 6 h in vitro hypoxia. HIF-1 alpha mRNA expression was determined by RT-PCR as described in Materials and Methods. Each bar represents the mean \pm SD of relative density/volumes of the bands on film negatives from at least three experiments. Asterisks and number sign indicate significant difference ($p < 0.01$; one-way ANOVA, followed by multiple comparisons among means). Image collected and cropped by CiteAb from the following publication (<http://jneuroinflammation.biomedcentral.com/articles/10.1186/1742-2094-4-12>), licensed under a CC-BY license. HIF-1 alpha Antibody [NB100-654]



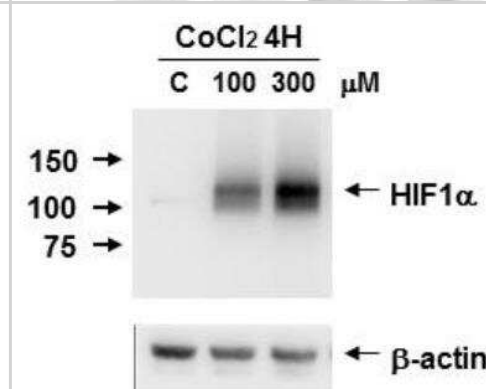
Immunocytochemistry/Immunofluorescence: HIF-1 alpha Antibody Pack [NB100-905] - Detection of HIF-1 alpha (red dye 568) in a cultured raw mouse macrophage cell line, using NB100-131. 100X magnification. Photos courtesy of Susan Alexander and Hattie Gresham, PhD. HIF-1 alpha Antibody (ESEE122) [NB100-131]



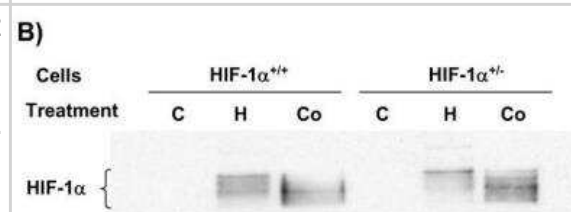
Western Blot: HIF-1 alpha Antibody Pack [NB100-905] - Normoxic pretreatment sensitizes glioma cells to radiation after graded chronic hypoxic (GCH) exposure. The results of anchorage-independent colony forming assays are shown for U87, U87-luc, GL261 glioma cells and 0308 GSCs after 5 Gy radiation exposure under varying O₂ conditions. For easier comparisons among cell types, raw values are expressed as a % of the cell type's negative (non-irradiated) control and the means & SEMs are plotted. Also shown are Western blots of nuclear HIF-1alpha at the time of irradiation. Corresponding Western blots of lamin A/C are shown as a loading control. Image collected and cropped by CiteAb from the following publication (<http://dx.plos.org/10.1371/journal.pone.0111199>) licensed under a CC-BY license. HIF-1 alpha Antibody [NB100-479].



Western Blot: HIF-1 alpha Antibody Pack [NB100-905] - HIF-1 alpha induction on Caki-1 cell lysate using CoCl₂. Image from verified customer review. HIF-1 alpha Antibody [NB100-449]



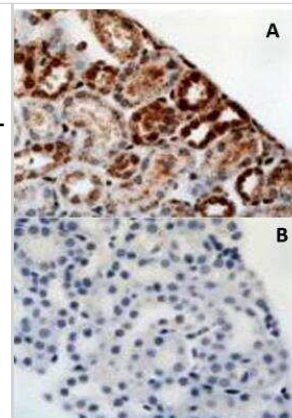
Western Blot: HIF-1 alpha Antibody Pack [NB100-905] - Effects of CoCl₂ treatment on HIF-1 alpha expression in mouse astrocytes. Western blots using nuclear proteins show that both hypoxia (H) and CoCl₂ (Co) up-regulated HIF-1 alpha protein in HIF-1 alpha^{+/+} and HIF-1 alpha^{+/-} cells. There was no HIF-1 alpha protein detected in control cells. Image collected and cropped by CiteAb from the following publication (<http://jneuroinflammation.biomedcentral.com/articles/10.1186/1742-2094-4-12>), licensed under a CC-BY license. HIF-1 alpha Antibody [NB100-654]



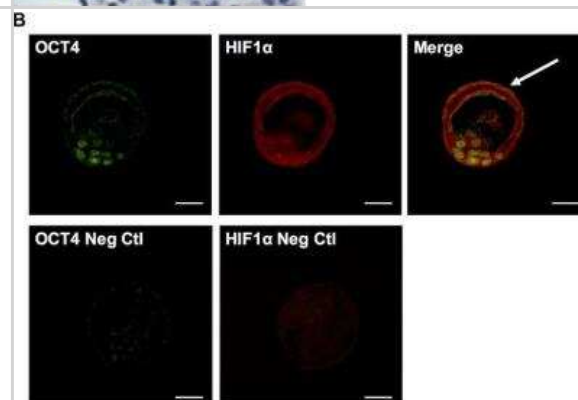
Immunocytochemistry/Immunofluorescence: HIF-1 alpha Antibody Pack [NB100-905] - Detection of HIF-1 alpha (red dye) in a cell cytospin from a lavage of a murine skin pouch infected with Staph Aureus, using NB100-131. 100X magnification. Blue dye is DAPI nuclei



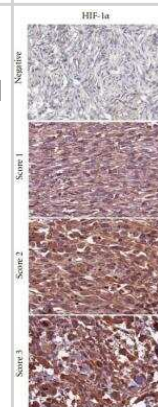
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-905] - Staining in normal mouse kidney showing (A) staining with antibody and (B) blocking peptide used at 10-fold excess concentration. Images provided by Dr Yves Heremans. Please see the product review of NBC1-18422 for additional details. HIF-1 alpha Antibody [NB100-479]



Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-905] - Hif1alpha expression in preimplantation embryos. Co-staining of OCT4 and Hif1alpha in inner cell mass of blastocyst (top) and negative control images without primary antibodies (bottom). Scale bar: 30um. Image collected and cropped by CiteAb from the following publication (<https://dx.plos.org/10.1371/journal.pone.0154309>) licensed under a CC-BY license. HIF-1 alpha Antibody [NB100-479]



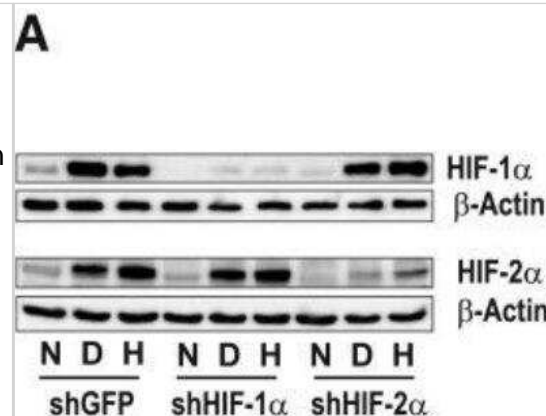
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-905] - Immunohistochemical analysis in non-GIST STS representing negative, and score 1-3 of Carbonic Anhydrase IX/CA9, GLUT-1, HIF-1 alpha, and HIF-2 alpha/EPAS1. non-GIST STS: non-gastrointestinal stromal tumor soft-tissue sarcomas, Carbonic Anhydrase IX/CA9: carbonic anhydrase IX, GLUT-1: glucose transporter-1, and HIF-1/2alpha: hypoxia induced factor 1/2alpha. Image collected and cropped by CiteAb from the following publication (<http://www.hindawi.com/journals/sarcoma/2012/541650/>), licensed under a CC-BY license. HIF-1 alpha Antibody (ESEE122) [NB100-131]



Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-905] - Analysis of HIF-1 alpha in paraffin-embedded mouse kidney tissue section using anti-HIF-1 alpha antibody. Image from verified customer review. HIF-1 alpha Antibody (ESEE122) [NB100-131]



Western Blot: HIF-1 alpha Antibody Pack [NB100-905] - Morphological alterations induced by DMOG are HIF-1alpha dependent. glEND.2 cells were stably transfected with shGFP, shHIF-1alpha or shHIF-2alpha. The clones were cultured under normoxic (N) or hypoxic (H, 1% O₂) conditions, or treated with DMOG for 6 h. 30 ug protein of cellular protein were loaded for the detection of HIF-1alpha, and nuclear extracts (20 ug protein) were used for the detection of HIF-2alpha. Image collected and cropped by CiteAb from the following publication (<https://biosignaling.biomedcentral.com/articles/10.1186/1478-811X-11-80>) licensed under a CC-BY license. HIF-1 alpha Antibody [NB100-449]



Publications

Jeon, H et al. Quercetin activates an angiogenic pathway, hypoxia inducible factor (HIF)-1-vascular endothelial growth factor, by inhibiting HIF-prolyl hydroxylase: a structural analysis of quercetin for inhibiting HIF-prolyl hydroxylase. *Mol Pharmacol* 71(6):1676-84. 2007-06-01 [PMID: 17377063]

Gu, M et al. Silibinin inhibits inflammatory and angiogenic attributes in photocarcinogenesis in SKH-1 hairless mice. *Cancer Res* 67(7):3483-91. 2007-04-01 [PMID: 17409458] (WB, Mouse)

Winner M, Koong AC, Rendon BE et al. Amplification of tumor hypoxic responses by macrophage migration inhibitory factor-dependent hypoxia-inducible factor stabilization. *Cancer Res* 2007-01-01 [PMID: 17210698] (IP, WB, Human)

Su, H et al. Adeno-associated viral vector-mediated hypoxia response element-regulated gene expression in mouse ischemic heart model. *Proc Natl Acad Sci U S A* 99(14):9480-5. 2002-07-09 [PMID: 12084814] (IF/IHC, Mouse)



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Products Related to NB100-905

H00003091-P01-10ug	Recombinant Human HIF-1 alpha GST (N-Term) Protein
NB100-105	HIF-1 alpha Antibody (H1alpha67)
NB100-479	HIF-1 alpha Antibody - BSA Free
NB100-122	HIF-2 alpha/EPAS1 Antibody - BSA Free

Limitations

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