

Product Datasheet

HIF-1 alpha Antibody Pack

NB100-901IHC

Unit Size: 4 Vials

Store at 4C. Do not freeze.

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NB100-901IHC**HIF-1 alpha Antibody Pack**

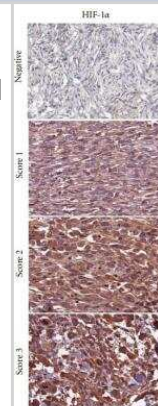
Product Information	
Unit Size	4 Vials
Concentration	Concentration of individual antibodies may be found on the vial label. If unlisted please contact technical services.
Storage	Store at 4C. Do not freeze.
Product Description	
Description	This pack contains 1 vial each of: NB100-479SS (0.025 mL), NB100-449SS (0.025 mL), NB100-123SS (0.05 mL) and NB100-131SS (0.05 mL).
Gene ID	3091
Gene Symbol	HIF1A
Species	Human, Mouse, Rat
Specificity/Sensitivity	These antibodies are specific for HIF-1 alpha.
Immunogen	For NB100-131: Human HIF-1 alpha amino acids 329-530. For NB100-123: Fusion protein containing amino acids 432-528 of human HIF-1alpha. For NB100-449: peptide between residues 775 and the C-terminus (residue 826) of human HIF-1 alpha. For NB100-479: A fusion protein including amino acids 530 - 825 of the mouse HIF-1 alpha protein [Uniprot# Q61221].
Kit Components	NB100-131SS, NB100-123SS, NB100-449SS, NB100-479SS
Product Application Details	
Applications	Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Knockdown Validated
Recommended Dilutions	Western Blot, Simple Western, Flow Cytometry, Immunohistochemistry, Immunocytochemistry/Immunofluorescence, Immunoprecipitation, Immunohistochemistry-Paraffin, Knockdown Validated
Application Notes	Immunohistochemical staining of paraffin-embedded and frozen sections (only NB100-131 has been used on frozen sections). Antigen retrieval is strongly recommended. With the exception of NB100-449 and NB100-479 (which are also recommended for Western blot), these antibodies work for Western blot analysis but are not specifically recommended for this application. A starting dilution of 1:1000 is recommended with titration up or down depending upon the signal and background. See individual datasheets for validated applications.



Images

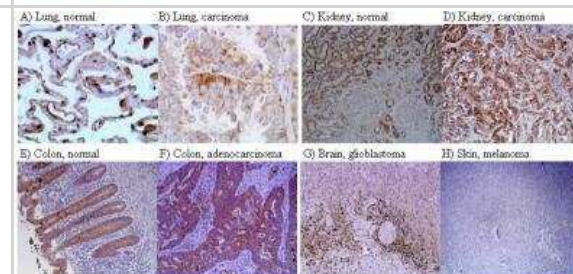
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - Immunohistochemical analysis in non-GIST STS representing negative, and score 1-3 of Carbonic Anhydrase IX/CA9, GLUT-1, HIF-1 alpha, and HIF-2 alpha/EPAS1. non-GIST STS: non-gastrointestinal stromal tumor soft-tissue sarcomas, Carbonic 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 licence. HIF-1 alpha Antibody (ESEE122) [NB100-131]

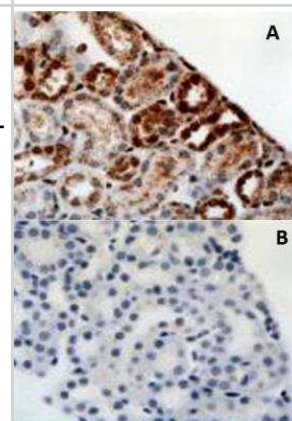


Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - Immunohistochemical detection of HIF-1alpha protein in human tissues. The nature of the tissue is indicated on top of each figure. Original magnifications are as follows: A, x400; B, x400; C, x100; D, x100; E, x100; F, x100; G, x40; H, x40. Image collected and cropped by CiteAb from the following publication

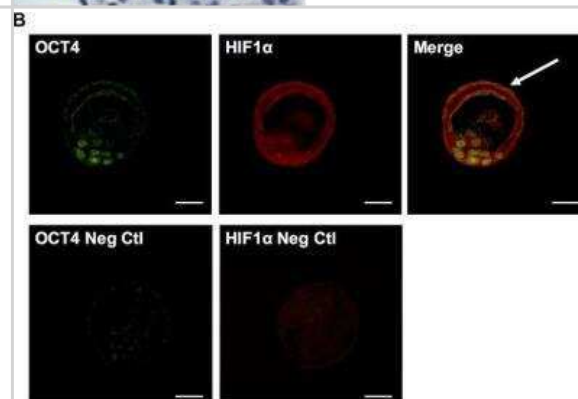
(<http://bmccgenet.biomedcentral.com/articles/10.1186/1471-2156-5-27>), licensed under a CC-BY licence. HIF-1 alpha Antibody (H1alpha67) [NB100-123]



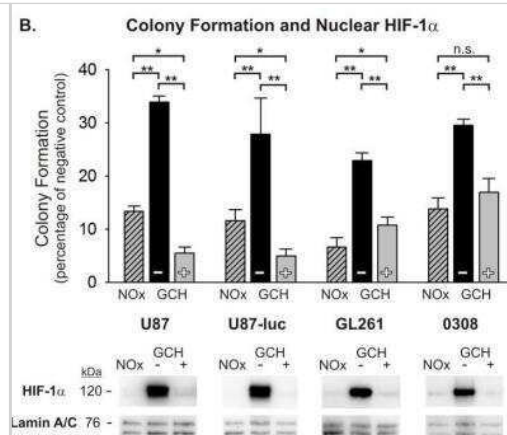
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - Staining in normal mouse kidney showing (A) staining with antibody and (B) blocking peptide used at 10-fold excess concentration. Images provided by Dr Yves Heremans. Please see the product review of NBC1-18422 for additional details. HIF-1 alpha Antibody [NB100-479]



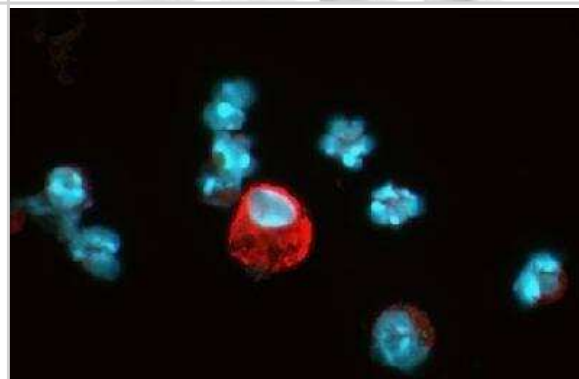
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - Hif1alpha expression in preimplantation embryos. Co-staining of OCT4 and Hif1alpha in inner cell mass of blastocyst (top) and negative control images without primary antibodies (bottom). Scale bar: 30um. Image collected and cropped by CiteAb from the following publication (<http://dx.plos.org/10.1371/journal.pone.0154309>) licensed under a CC-BY licence. HIF-1 alpha Antibody [NB100-479]



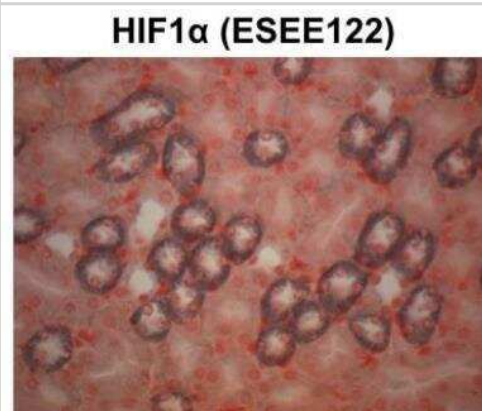
Western Blot: HIF-1 alpha Antibody Pack [NB100-901IHC] - Normoxic pre-treatment sensitizes glioma cells to radiation after graded chronic hypoxic (GCH) exposure. The results of anchorage-independent colony forming assays are shown for U87, U87-luc, GL261 glioma cells and 0308 GSCs after 5 Gy radiation exposure under varying O₂ conditions. Each result represents at least 3 independent samples, plated in triplicate. Holm-Sidak comparisons for multiple groups were used for statistical comparisons of raw values (* $p < 0.05$, ** $p < 0.01$). Also shown are Western blots of nuclear HIF-1 alpha 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 (<https://doi.org/10.1371/journal.pone.0111199>) licensed under a CC-BY licence. HIF-1 alpha Antibody [NB100-479]



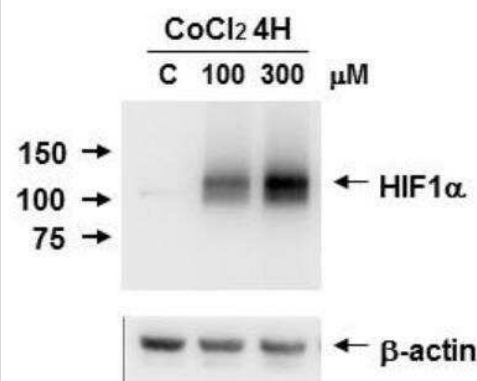
Immunocytochemistry/Immunofluorescence: HIF-1 alpha Antibody Pack [NB100-901IHC] - Detection of HIF-1 alpha (red dye) in a cell cytospin from a lavage of a murine skin pouch infected with *S. aureus*. 100X magnification. Blue: DAPI nuclear staining. HIF-1 alpha Antibody (ESEE122) [NB100-131]



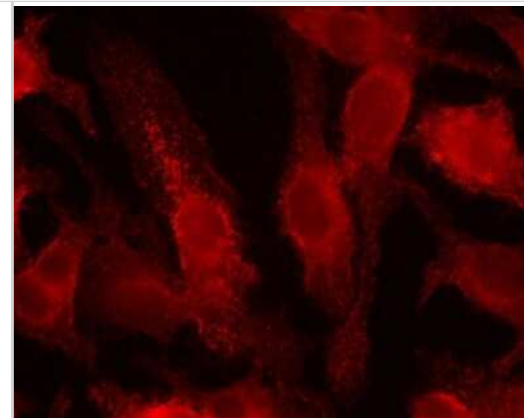
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - Analysis of a FFPE mouse kidney tissue section using HIF-1 alpha antibody clone ESEE122 at 1 μ g/mL concentration. The detection was performed using X-cell plus universal HRP polymer detection system with Vector SG chromagen substrate. Image courtesy of a product review by Steven Grover. HIF-1 alpha Antibody (ESEE122) [NB100-131]



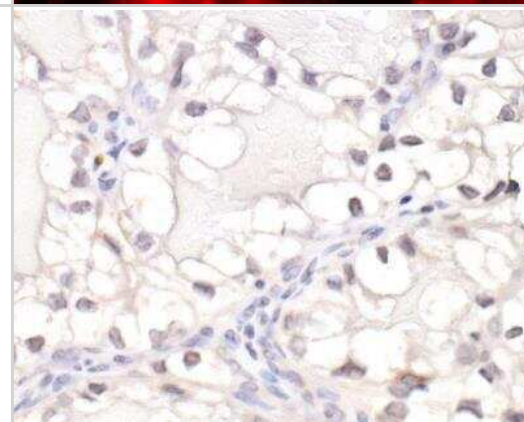
Western Blot: HIF-1 alpha Antibody Pack [NB100-901IHC] - HIF-1 alpha induction on Caki-1 cell lysate using CoCl₂. Image from verified customer review. HIF-1 alpha Antibody [NB100-449]



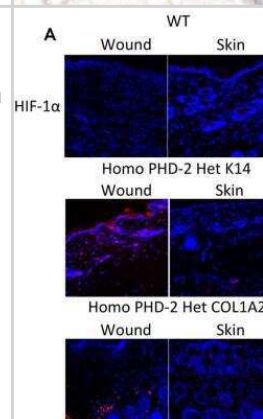
Immunocytochemistry/Immunofluorescence: HIF-1 alpha Antibody Pack [NB100-901IHC] - Detection of HIF-1 alpha (red dye 568) in a cultured raw mouse macrophage cell line, using NB100-131. 100X magnification. Photos courtesy of Susan Alexander and Hattie Gresham, PhD.



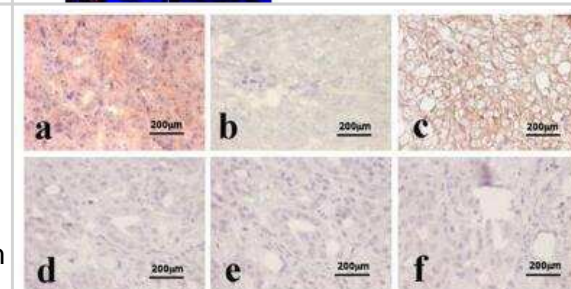
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - Detection of human HIF-1 alpha by immunohistochemistry. Sample: FFPE section of renal cell carcinoma. Antibody: Affinity purified rabbit anti-HIF-1 alpha antibody (NB110-58773). Detection: DAB. HIF-1 alpha Antibody [NB100-449]



Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - Immunofluorescence of wounded tissue and normal unwounded skin. Representative images for immunofluorescent staining of HIF-1 alpha on healed wounded skin and adjacent normal unwounded skin of wild type, heterozygous K14-Cre/homozygous floxed PHD-2, and heterozygous Col1 alpha2-Cre-ER/homozygous floxed PHD-2 mice at 400x magnification. Image collected and cropped by CiteAb from the following publication ([//doi.org/10.1371/journal.pone.0093373](https://doi.org/10.1371/journal.pone.0093373)), licensed under a CC-BY licence. HIF-1 alpha Antibody [NB100-479]



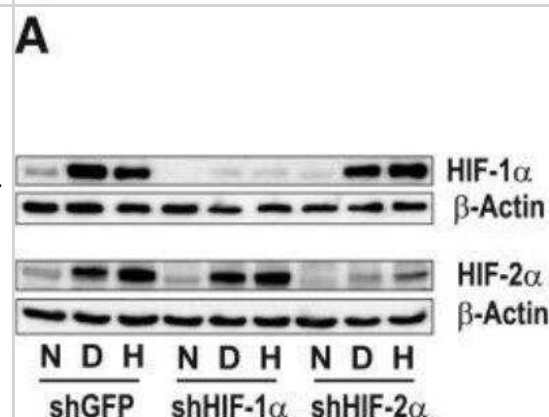
Immunohistochemistry: HIF-1 alpha Antibody Pack [NB100-901IHC] - In situ hybridization (antisense probe, Fig. 3a) and immunostaining with HIF1a Ab2 (Fig. 3c) on thin adjacent sections of NE-differentiated prostate adenocarcinoma showed co-localization of HIF1a1.2 transcript and HIF-1a protein. Incubation with sense probe did not generate any detectable hybridization signals (Fig. 3b). Both In situ hybridization (Fig. 3d antisense) and HIF-1a Ab2 immunostaining (Fig. 3f) were negative in non-NE-differentiated prostate adenocarcinoma. In situ hybridization with sense probe performed on non-NE-differentiated prostate cancer (Fig. 3e). Image collected and cropped by CiteAb from the following publication ([//www.biomedcentral.com/1471-2407/10/385](https://www.biomedcentral.com/1471-2407/10/385)), licensed under a CC-BY licence. HIF-1 alpha Antibody (H1alpha67) [NB100-123]



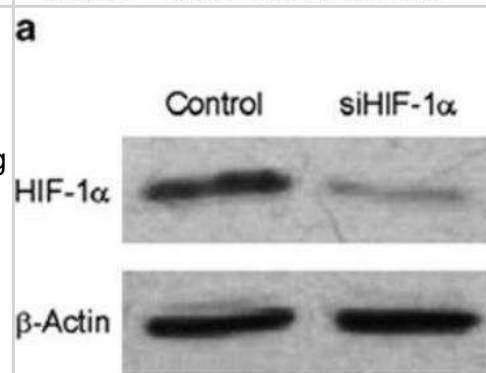
Simple Western: HIF-1 alpha Antibody Pack [NB100-901IHC] - Simple Western lane view shows a specific band for HIF-1 alpha in 0.5 mg/ml of hypoxic HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. HIF-1 alpha Antibody [NB100-449]



Knockdown Validated: HIF-1 alpha Antibody Pack [NB100-901IHC] - Morphological alterations induced by DMOG are HIF-1alpha dependent. gliEND.2 cells were stably transfected with shGFP, shHIF-1 alpha or shHIF-2 alpha. 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-1 alpha, and nuclear extracts (20 ug protein) were used for the detection of HIF-2 alpha. 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 licence. HIF-1 alpha Antibody [NB100-449]



Knockdown Validated: HIF-1 alpha Antibody Pack [NB100-901IHC] - HIF-1 inhibits the apoptosis of hypoxic glioblastoma cells. U87MG cells were transfected with siRNA against HIF-1 alpha. Forty-eight hours after transfection, cells were incubated for 2 h in hypoxia (1% O₂). HIF-1 alpha was detected by immunoblotting. beta-Actin was used as a loading control. The results are representative for three independent experiments. Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/cddis2013562>) licensed under a CC-BY licence. HIF-1 alpha Antibody (H1alpha67) [NB100-123]



Publications

Lee, S, Kim, SJ, Kim, DJ et al. The Clinical Significance of the Hypoxia Inducible Factor-1 C4d in Implantation Renal Biopsies Post-Transplant Biopsies. 22nd International Congress of the Transplantation Society. 2008-08-10

Hill, P et al. Inhibition of hypoxia inducible factor hydroxylases protects against renal ischemia-reperfusion injury. J Am Soc Nephrol;19(1):39-46. 2008-01-01 [PMID: 18178798]

Higami, Y et al. Energy restriction lowers the expression of genes linked to inflammation, the cytoskeleton, the extracellular matrix, and angiogenesis in mouse adipose tissue. J. Nutrition. 136: 343-352. 2006-01-01 [PMID: 16424110]

Tanaka, T et al. Hypoxia-inducible factor modulates tubular cell survival in cisplatin nephrotoxicity. Am J Physiol Renal Physiol;289(5):F1123-33. 2005-11-01 [PMID: 15956779]

Quintero, M et al. Nitric oxide is a factor in the stabilization of hypoxia-inducible factor-1alpha in cancer: role of free radical formation.. Can. Res. 66: 770-774. 2006-01-01 [PMID: 16424008]



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