

# Product Datasheet

## HIF-1 alpha Antibody (HA111) - BSA Free NB100-296SS

Unit Size: 0.025 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NB100-296SS**

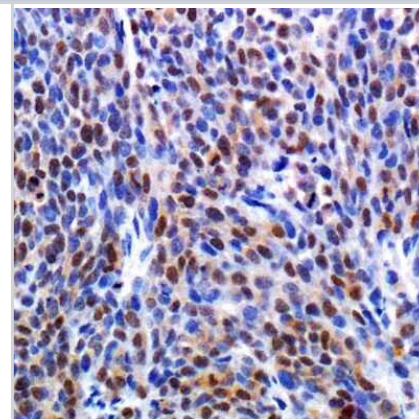
HIF-1 alpha Antibody (HA111) - BSA Free

Product Information	
Unit Size	0.025 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	HA111
Preservative	0.02% Sodium Azide
Isotype	IgG2 Alpha
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	93 kDa
Product Description	
Host	Mouse
Gene ID	3091
Gene Symbol	HIF1A
Species	Human, Mouse, Rabbit
Reactivity Notes	Mouse reactivity reported in literature (PMID: 16738327). Rabbit reactivity reported in scientific literature (PMID: 16738327).
Immunogen	This HIF-1 alpha Antibody (HA111) was developed against Human HIF-1 alpha, corresponding to amino acids 329 - 530 [Uniprot# Q16665].
Product Application Details	
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 0.5 - 2.0 ug/ml, Immunohistochemistry 1:100, Immunoprecipitation 1:10 - 1:500. Use reported in scientific literature (PMID 18222538), Immunohistochemistry-Paraffin 1:100
Application Notes	In IHC-P, staining was observed in the nucleus of human ovarian cancer tumor. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. Nuclear extracts should be used for Western blot analysis.

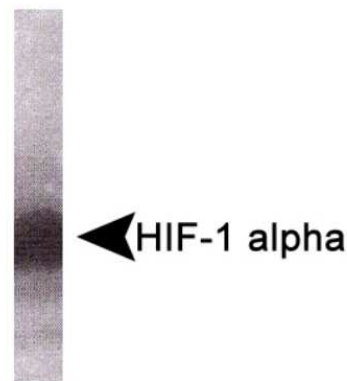


## Images

Immunohistochemistry-Paraffin: HIF-1 alpha Antibody (HA111) [NB100-296] - HIF-1 antibody was tested in human ovarian cancer tumor xenograft using DAB with hematoxylin counterstain.



Western Blot: HIF-1 alpha Antibody (HA111) [NB100-296] - Detection of HIF-1 alpha (125-130 kDa) from human placental villous explant total protein.



## Publications

Iorio J, Lastraioli E, Tofani L et al. hERG1 and HIF-2 alpha Behave as Biomarkers of Positive Response to Bevacizumab in Metastatic Colorectal Cancer Patients Transl Oncol 2020-02-24 [PMID: 32105990] (IHC-P, Human)

Lee KE, Spata M, Maduka R et al. Hif1a Deletion Limits Tissue Regeneration via Aberrant B Cell Accumulation in Experimental Pancreatitis. Cell Rep 2018-06-19 [PMID: 29924990] (IF/IHC, Mouse)

Li F, Lee KE, Simon MC. Detection of Hypoxia and HIF in Paraffin-Embedded Tumor Tissues Methods Mol. Biol. 2018-01-14 [PMID: 29330808] (IHC-P)

Jensen RL, Ragel BT, Whang K, Gillespie D Inhibition of hypoxia inducible factor-1alpha (HIF-1alpha) decreases vascular endothelial growth factor (VEGF) secretion and tumor growth in malignant gliomas. J Neurooncol 2006-07-01 [PMID: 16612574]

Lee KE, Spata M, Bayne LJ et al. Hif1alpha deletion reveals pro-neoplastic function of B cells in pancreatic neoplasia. Cancer Discov. 2015-12-29 [PMID: 26715642] (IHC-P, Human)

Zheng X, Ruas JL, Cao R et al. Cell-type-specific regulation of degradation of hypoxia-inducible factor 1a: Role of subcellular compartmentalization. Mol Cell Biol 2006-06-01 [PMID: 16738327] (IP, WB, Rabbit)

Rajakumar A, Michael HM, Daftary A et al. Proteasomal activity in placentas from women with preeclampsia and intrauterine growth restriction: implications for expression of HIF-alpha proteins. Placenta 2008-03-01 [PMID: 18222538] (IP, Human)

Lauzier, MC et al. (2R)-[(4-Biphenylsulfonyl)amino]-N-hydroxy-3-phenylpropionamide (BiPS), a matrix metalloprotease inhibitor, is a novel and potent activator of hypoxia-inducible factors. Mol Pharmacol;74(1):282-8. 2008-07-01 [PMID: 18424552]

Gillespie, DL et al. Silencing of hypoxia inducible factor-1alpha by RNA interference attenuates human glioma cell growth in vivo. Clin Cancer Res. 2007-01-01 [PMID: 17438103]

## Procedures

### **Immunohistochemistry-Paraffin protocol for HIF-1 alpha Antibody (NB100-296)**

HIF-1 alpha Antibody (HA111):

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 degrees C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.





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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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