Product Datasheet

HIF-1 alpha Antibody
NB100-654SS

Unit Size: 0.025 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

Reviews: 1 Publications: 5

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NB100-654SS

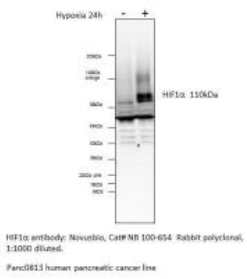
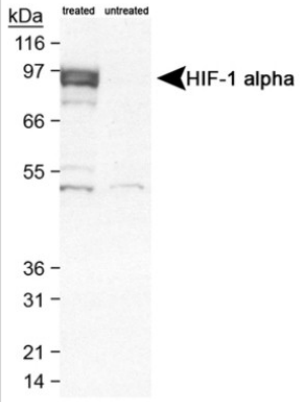
HIF-1 alpha Antibody

Product Information	
Unit Size	0.025 ml
Concentration	1 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Purity	Immunogen affinity purified
Buffer	Tris-glycine, 150 mM NaCl

Product Description	
Host	Rabbit
Gene ID	3091
Gene Symbol	HIF1A
Species	Human, Mouse, Rat, Porcine
Species Reactivity	Human and porcine. Does not react with rat. Immunogen sequence has 93% homology to bovine and 90% homology to mouse.Mouse reactivity reported in scientific literature (PMID: 23959856) Rat reactivity reported in scientific literature (PMID: 24122166)
Immunogen	Fusion protein containing amino acids 432-528 of human HIF-1 alpha [UniProt# Q16665]

Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:1000, Immunocytochemistry/Immunofluorescence, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Simple Western 1:100
Application Notes	This HIF-1 alpha antibody is useful for Western blot. Nuclear extracts are recommended. Immunocytochemistry/Immunofluorescence, Immunohistochemistry-Frozen and Immunohistochemistry-Paraffin were reported in scientific literature.In Simple Western only 10-15 uL of the recommended dilution is used per data point.

Images

Western Blot: HIF-1 alpha Antibody [NB100-654] - Panc0813 human pancreatic cell line. Image supplied by customer using Lot C-2.	
Western Blot: HIF-1 alpha Antibody [NB100-654] - Detection of HIF-1 alpha in Cobalt Chloride treated/untreated Cos-7 nuclear extracts using NB100-654.	
Simple Western: HIF-1 alpha Antibody [NB100-654] - 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.	

Publications

Flann KL, Rathbone CR, Cole LC et al. Hypoxia simultaneously alters satellite cell-mediated angiogenesis and hepatocyte growth factor expression. J Cell. Physiol. 2014 May 01 [PMID: 24122166] (WB, Rat)

Details:
HIF1 alpha antibody used for WB on cytoplasmic and nuclear extractions of normoxia, hypoxia or uM 150 CoCl2 exposed primary satellite cells which were isolated from male Sprague Dawley rats (Figure 4).

Cao Y, Eble JM, Moon E et al. Tumor Cells Upregulate Normoxic HIF-1alpha in Response to Doxorubicin. Cancer Res. 2013 Aug 19 [PMID: 23959856] (WB, Human, Mouse)

Thiersch M, Lange C, Joly S et al. Retinal neuroprotection by hypoxic preconditioning is independent of hypoxia-inducible factor-1 alpha expression in photoreceptors. Eur J Neurosci 2009 Jun [PMID: 19508692] (IHC-Fr, ICC/IF, Mouse)

Yasui H, Ogura A, Asanuma T et al. Inhibition of HIF-1alpha by the anticancer drug TAS106 enhances X-ray-induced apoptosis in vitro and in vivo. Br J Cancer;99(9):1442-52. 2008 Nov 4. [PMID: 18854835] (IHC-P, Human)

Chiang C-K, Tanaka T, Inagi R et al. Indoxyl sulfate, a representative uremic toxin, suppresses erythropoietin production in a HIF-dependent manner. Lab Invest. 2011 Aug 22. [PMID: 21863063]

Procedures

Protocol specific for HIF-1 alpha Antibody (NB100-654)
Western Blot Protocol

1. Perform SDS-PAGE (3-8%) on samples to be analyzed, loading 40 ug of total protein per lane.

2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.

3. Stain the blot using ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.

4. Rinse the blot in TBS for approximately 5 minutes.

5. Block the membrane using 5% non-fat dry milk in TBS for 1 hour.

6. Dilute the rabbit anti-HIF-1 alpha primary antibody (NB 100-654) in blocking buffer and incubate 2 hours at room temperature.

7. Wash the membrane in water for 5 minutes and apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) and incubate 1 hour at room temperature.

8. Wash the blot in TBS containing 0.05-0.1% Tween-20 for 10-20 minutes.

9. Wash the blot in type I water for an additional 10-20 minutes (this step can be repeated as required to reduce background).

10. Apply the detection reagent of choice in accordance with the manufacturer's instructions (Amersham's ECL is the standard reagent used at Novus Biologicals).

Note: Tween-20 can be added to the blocking buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.

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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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.