

Product Datasheet

EGLN3/PHD3 Antibody **NB100-303SS**

Unit Size: 0.025 ml

Store at 4C. Do not freeze.

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NB100-303SS

EGLN3/PHD3 Antibody

Product Information	
Unit Size	0.025 ml
Concentration	1 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Purity	Immunogen affinity purified
Buffer	Tris-citrate/phosphate, pH 7-8
Target Molecular Weight	27 kDa

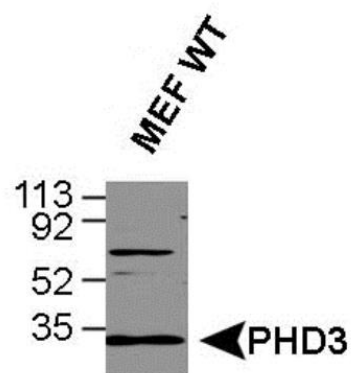
Product Description	
Host	Rabbit
Gene ID	112399
Gene Symbol	EGLN3
Species	Human, Mouse, Primate
Species Reactivity	Human and mouse. Primate reactivity reported in scientific literature (PMID: 23732909). Immunogen sequence has 92% homology to rat.
Immunogen	A synthetic peptide made to the C-terminus of humanPHD3/HIF Prolyl Hydroxylase 3. [LocusLink ID 112399]

Product Application Details	
Applications	Western Blot, Simple Western, Chromatin Immunoprecipitation, Immunoprecipitation
Recommended Dilutions	Immunoprecipitation 1:10-1:500, Western Blot 1:500-1:2000, Chromatin Immunoprecipitation, Simple Western 1:1000
Application Notes	This PHD3/HIF Prolyl Hydroxylase 3 antibody is useful for Immunoprecipitation and Western blot, where a band is seen at ~27 kDa. This antibody has been tested against HeLa and MEF cell lysates. Immunoprecipitation was reported in PMID: 21575608. Chromatin Immunoprecipitation was reported in scientific literature. In Simple Western only 10-15 uL of the recommended dilution is used per data point.

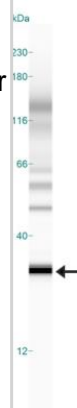


Images

Western Blot: PHD3/HIF Prolyl Hydroxylase 3 Antibody [NB100-303] - Western Blot analysis of human PHD3, using NB100-303. Samples: MEF whole cell lysate.



Simple Western: EGLN3/PHD3 Antibody [NB100-303] - Simple Western lane view shows a specific band for PHD3/HIF Prolyl Hydroxylase 3 in 0.5 mg/ml of Hypoxic HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Publications

Kim M, Neinast MD, Frank AP et al. ERalpha upregulates Phd3 to ameliorate HIF-1 induced fibrosis and inflammation in adipose tissue *Mol Metab.* 2014 Sep 01 [PMID: 25161887] (IHC-P, Mouse)

Details:

EGLN3/PHD3 antibody used for IHC-P application on ON/10% formalin fixed visceral adipose tissues from 95 day old mice - female, male, and female ERKO/global knockout of Er alpha mice (Figure 1F).

Henze At, Garvalov Bk, Seidel S et al. Loss of PHD3 allows tumours to overcome hypoxic growth inhibition and sustain proliferation through EGFR. *Nat Commun.* 2014 Nov 25 [PMID: 25420773]

Garvalov Bk, Foss F, Henze At et al. PHD3 regulates EGFR internalization and signalling in tumours. *Nat Commun.* 2014 Nov 25 [PMID: 25420589] (WB, Human)

Lindholm ME, Fischer H, Poellinger L et al. Negative regulation of HIF in skeletal muscle of elite endurance athletes - a tentative mechanism promoting oxidative metabolism *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 2014 Jun 04 [PMID: 24898836] (WB, Human)

Details:

PHD3/HIF Prolyl Hydroxylase 3 antibody used for WB on human biopsy samples (vastus lateralis muscle obtained via percutaneous needle technique) in experiments involving endurance-trained /elite cyclists-triathletes and moderately active men (Figures 2B, 4)

Reischl S, Li L, Walkinshaw G et al. Inhibition of HIF prolyl-4-hydroxylases by FG-4497 reduces brain tissue injury and edema formation during ischemic stroke. *PLoS ONE* 2014 Jan 10 [PMID: 24409307] (WB, Mouse)

Kim J, Kwak HJ, Cha JY et al. The role of prolyl hydroxylase domain protein (PHD) during rosiglitazone-induced adipocyte differentiation. *J Biol Chem* 2013 Dec 12 [PMID: 24338020] (WB, Mouse)

Tan JT, Prosser HC, Vanags LZ et al. High-density lipoproteins augment hypoxia-induced angiogenesis via regulation of post-translational modulation of hypoxia-inducible factor 1alpha. *FASEB J.* 2013 Sep 10 [PMID: 24022405] (WB, Human)

Wiley M, Sweeney KR, Chan DA et al. Toxoplasma gondii activates hypoxia-inducible factor (HIF) by stabilizing the HIF-1alpha subunit via type I activin-like receptor kinase receptor signaling. *J Biol Chem.* 2010 Aug 27 [PMID: 20581113] (WB, Human)

Cervera AM, Apostolova N, Luna-Crespo F et al. An alternatively spliced transcript of the PHD3 gene retains prolyl hydroxylase activity. *Cancer Lett* 2006 Feb 20 [PMID: 16473674]

Fu J, Taubman MB. EGLN3 Inhibition of NF-kB Is Mediated by Prolyl Hydroxylase-independent Inhibition of IKKgamma Ubiquitination. *Mol Cell Biol* 2013 Jun 3 [PMID: 23732909] (WB, Human, Primate)

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 Mar [PMID: 18222538] (WB, Human)

Cobo AG, Silva RS, Serna A et al. Cellular overexpression of Aquaporins slows down the natural HIF-2alpha degradation during prolonged hypoxia *Gene* 2013 Mar 29 [PMID: 23545307] (WB, Rat)

More publications at <http://www.novusbio.com/NB100-303>



Procedures

Western Blot Protocol for PHD3/HIF Prolyl Hydroxylase 3 Antibody (NB100-303)

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 35 ug of sample lysate per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.





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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.

