Product Datasheet

COX-1 Antibody
NBP1-85500

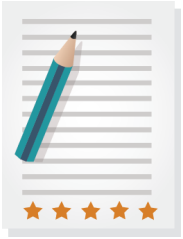
Unit Size: 0.1 ml

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

Reviews: 1 Publications: 3

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-85500

Updated 12/20/2023 v.20.1



NBP1-85500

COX-1 Antibody

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

Product Description

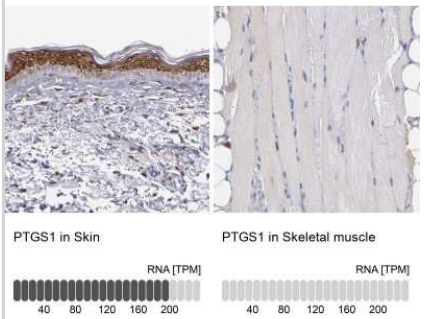
Host	Rabbit
Gene ID	5742
Gene Symbol	PTGS1
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported from a verified customer review.
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: MPDSFKVGSQEYSYEQFLFNTSMLVDYGVEALVDAFSRQIAGRIGGGRNMDH HILHVAVDVIRESREMRLQPFNEYRKRFGMKPYTSFQELVGEKEMAAELEELY GDIDALEFYPGLLLEKCHPNSIFGESMIEIGAPFSLKGLLGN

Product Application Details

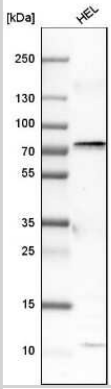
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Simple Western, Immunohistochemistry 1:50-1:200, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:50-1:200
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. ICC/IF Fixation Permeabilization, Use PFA/Triton X-100. COX-1 antibody validated for Simple Western from a verified customer review.

Images

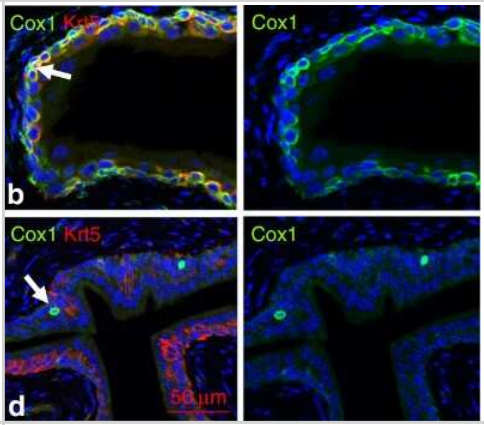
Immunohistochemistry-Paraffin: COX-1 Antibody [NBP1-85500] - Staining in human skin and skeletal muscle tissues using anti-PTGS1 antibody. Corresponding PTGS1 RNA-seq data are presented for the same tissues.



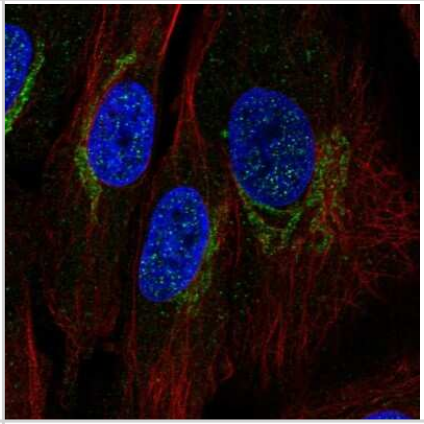
Western Blot: COX-1 Antibody [NBP1-85500] - Analysis in human cell line HELA.



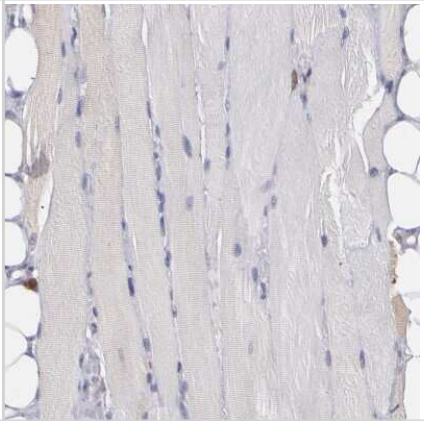
Immunocytochemistry/Immunofluorescence: COX-1 Antibody [NBP1-85500] - Validation of gene expression changes from RNA-Seq experiments. b, d Cox1 and Krt5 expression in a control (b) and in the ShhCre;Ppargfl/fl mutant urothelium (d). Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41467-019-12332-0), licensed under a CC-BY license.

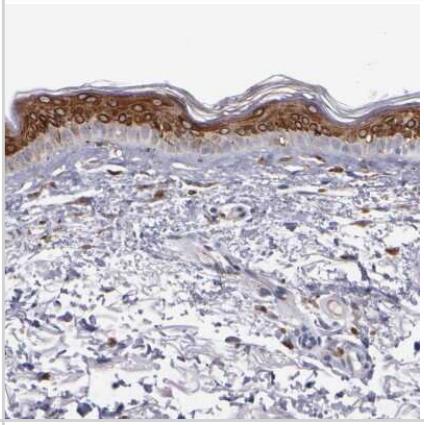
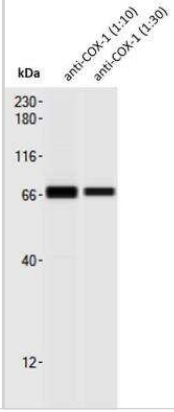


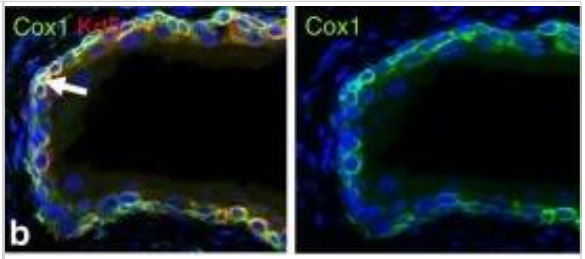
Immunocytochemistry/Immunofluorescence: COX-1 Antibody [NBP1-85500] - Staining of human cell line BJ shows localization to the Golgi apparatus. Antibody staining is shown in green.



Immunohistochemistry-Paraffin: COX-1 Antibody [NBP1-85500] - Staining of human skeletal muscle shows low expression as expected.



Immunohistochemistry-Paraffin: COX-1 Antibody [NBP1-85500] - Staining of human skin shows high expression.	
Simple Western: COX-1 Antibody [NBP1-85500] - Lane view shows one specific signal (~70kDa) in lysates prepared from the mouse tail vein. Image from a verified customer review.	



FASN Regulates HIF-α Protein Stability and HIF Target Gene Expression. (A) FASN siRNA downregulates HIF-α protein levels. PREC, HeLa and HCT116 cells were treated with FASN (+) or control (−) siRNA and harvested after 72 h. Cells were exposed to hypoxia (1% oxygen) or maintained in normoxia (21% oxygen) 4 h before harvesting and subjecting WCEs to western blot analysis. Unmodified (250 kDa) and modified (larger) FASN bands are indicated by large arrowheads, REDD1 by a small arrowhead, and HIF-1α and HIF-2α by arrows. (B) Downregulation of HIF-1α and HIF-2α in HCT116 cell clones carrying the FASN gene mutagenized using CRISPR-Cas9 (See Supplementary Fig. S3 for genomic DNA information). Protein samples were prepared in normoxia (left column) or hypoxia (right column) for western blot analysis. Asterisk indicates a non-specific band. (C) Quantification of HIF-target gene expression by qPCR upon downregulation of FASN in PREC. Samples were prepared from cells treated as described for panel A but with 24 h hypoxia. siRNAs were transfected in triplicates and mRNAs of the HIF target genes were measured in biological triplicates and technical duplicates as a total of 6 samples by qPCR. Values were normalized against the PPIA reference gene and control samples. (D) Loss of downregulation of HIF-2α levels in ccRCC cells. pVHL-deficient 786-O and A498 cells were tested in FASN siRNA knockdown experiments. (E) Restoration of HIF-α regulation by stable expression of exogenous pVHL in SKRC10 cells. pVHL-WT or pVHL-Y112H were introduced into pVHL-deficient SKRC10 ccRCCs using a lentiviral vector carrying a weak promoter and HIF-α protein levels were examined. Specific and non-specific bands are indicated by arrows and an asterisk, respectively. (F) FASN and the E3 ligase components are present in the pVHL-containing complexes in a mutually exclusive manner. The indicated constructs were transfected into 293 T cells and WCEs prepared after 48 h were tested for protein-protein interactions by precipitation with an anti-Flag antibody-conjugated resin. Note that FASN failed to precipitate CUL2 and Elongin C, as shown in lanes 6 and 8. Experiments were repeated twice (D,E,F) or more (A,B), and the results were reproduced. The qPCR experiment (C) was performed once with biological triplicates. Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/28775317), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Publications

Liu C, Tate T, Batourina E et al. Pparg promotes differentiation and regulates mitochondrial gene expression in bladder epithelial cells Nat Commun 2019-10-09 [PMID: 31597917] (IHC-P, Mouse)

Uram L, Filipowicz A, Misiorek M et al. Biotinylated PAMAM G3 dendrimer conjugated with celecoxib and/or Fmoc-l-Leucine and its cytotoxicity for normal and cancer human cell lines Eur J Pharm Sci 2018-08-15 [PMID: 30118847] (WB, Human)

Asplund A, Gry Bjorklund M, Sundquist C et al. Expression profiling of microdissected cell populations selected from basal cells in normal epidermis and basal cell carcinoma. Br J Dermatol 2008-03-01 [PMID: 18241271]

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NBP1-85500PEP	COX-1 Recombinant Protein Antigen
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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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