

Product Datasheet

Aconitase 2 Antibody - BSA Free NBP1-90264

Unit Size: 0.1 ml

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

www.novusbio.com



technical@novusbio.com

Publications: 3

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-90264

Updated 2/21/2025 v.20.1

Earn rewards for product
reviews and publications.

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/NBP1-90264



NBP1-90264

Aconitase 2 Antibody - BSA Free

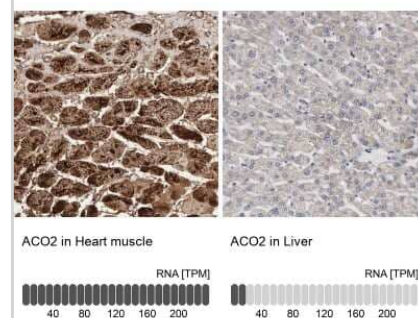
Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol
Target Molecular Weight	85 kDa

Product Description	
Host	Rabbit
Gene ID	50
Gene Symbol	ACO2
Species	Human, Mouse, Rat
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: GKKFRLEAPDADELPGKGFDPGQDTYQHPPKDSSGQHVDVSPTSQRLQLLEP FDKWDGKDLEDLQILIKVKGKCTTDHISAAGPWLFKFRGHLDNISNLLIGAINIEN GKANSVRNAVTQEFGPVPDTARYYKKGIRWVVIGDENYGE

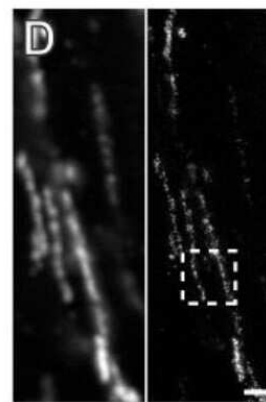
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Immunohistochemistry 1:500 - 1:1000, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:500 - 1:1000
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. ICC/IF, Fixation Permeabilization: Use PFA/Triton X-100.

Images

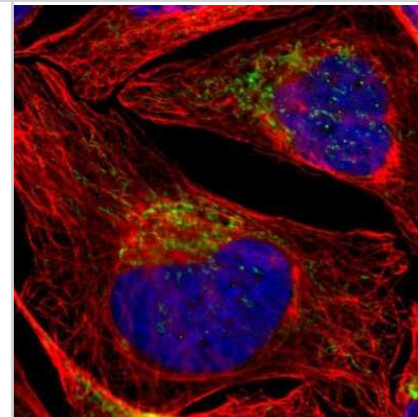
Immunohistochemistry-Paraffin: Aconitase 2 Antibody [NBP1-90264] - Staining in human heart muscle and liver tissues using NBP1-90264 antibody. Corresponding ACO2 RNA-seq data are presented for the same tissues.



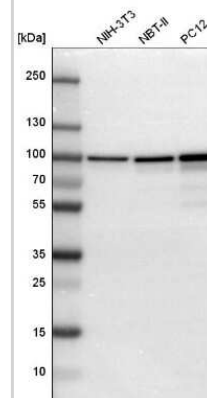
Immunohistochemistry: Aconitase 2 Antibody [NBP1-90264] - STED super-resolution microscopy of mitochondria in the rectal Muscularis externa demonstrates high structural preservation of the stored paraffin-embedded tissue. STED recordings were performed on 2 um thick dewaxed sections cut along the longitudinal axis of the rectum. STED images of tissue sections decorated with antisera against aconitase. In each panel the confocal (left) and the corresponding STED image (right) is displayed. Magnification of the STED image as indicated by a dashed square. Scale bar: 200 nm. Image collected and cropped by CiteAb from the following publication (<https://dx.plos.org/10.1371/journal.pone.0101563>), licensed under a CC-BY license.



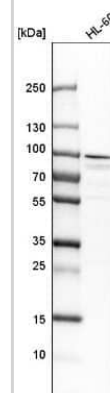
Immunocytochemistry/Immunofluorescence: Aconitase 2 Antibody [NBP1-90264] - Immunofluorescent staining of human cell line U-2 OS shows localization to mitochondria.



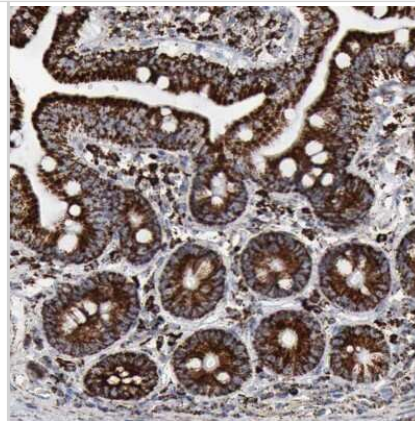
Western Blot: Aconitase 2 Antibody [NBP1-90264] - Western blot analysis in mouse cell line NIH-3T3, rat cell line NBT-II and rat cell line pC12.



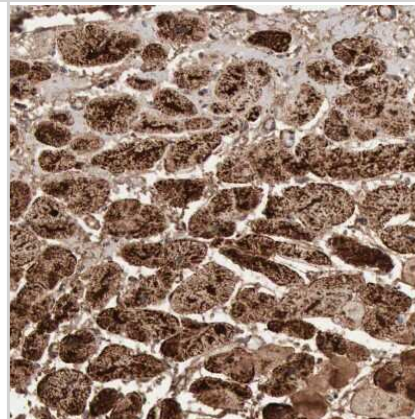
Western Blot: Aconitase 2 Antibody [NBP1-90264] - Analysis in human cell line HL-60.



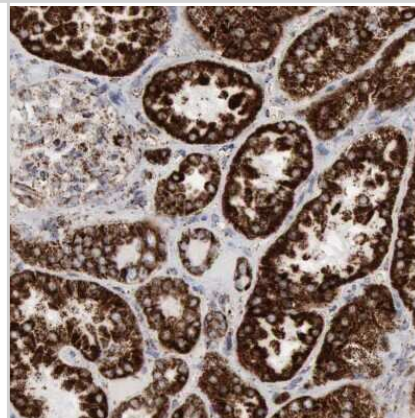
Immunohistochemistry-Paraffin: Aconitase 2 Antibody [NBP1-90264] - Staining of human duodenum shows strong granular cytoplasmic positivity in glandular cells.



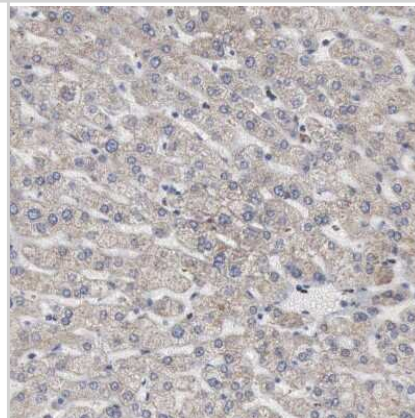
Immunohistochemistry-Paraffin: Aconitase 2 Antibody [NBP1-90264] - Staining of human heart muscle shows strong granular cytoplasmic positivity in cardiomyocytes.



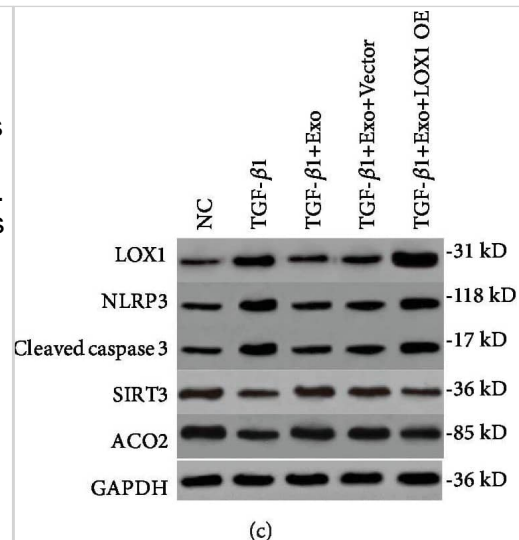
Immunohistochemistry-Paraffin: Aconitase 2 Antibody [NBP1-90264] - Staining of human kidney shows strong granular cytoplasmic positivity in cells in tubules.



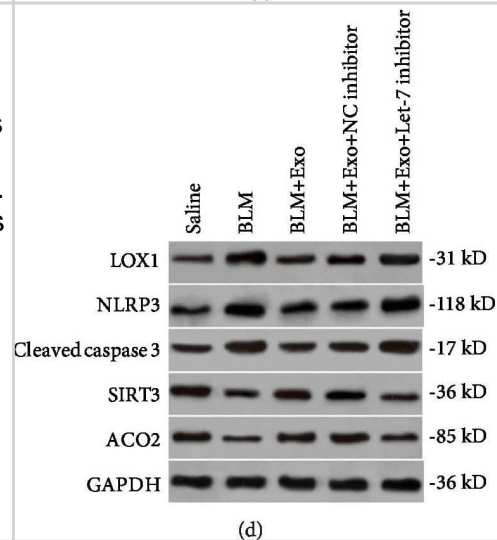
Immunohistochemistry-Paraffin: Aconitase 2 Antibody [NBP1-90264] - Staining of human liver shows very weak positivity in hepatocytes as expected.



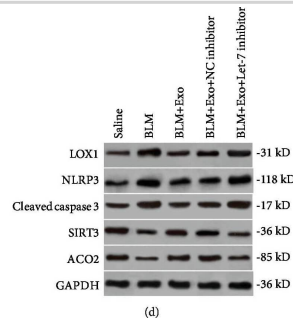
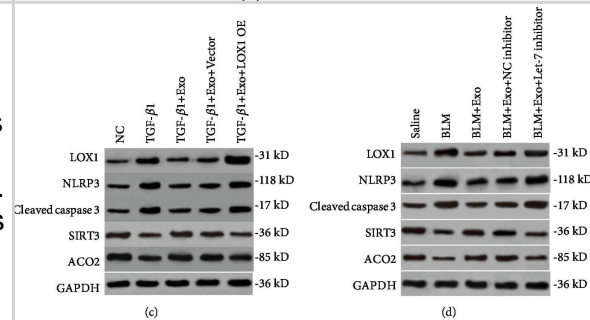
Western Blot: Aconitase 2 Antibody [NBP1-90264] - The regulation mechanism of LOX1 on alveolar epithelial cell apoptosis & fibrosis. (a) Cells were transfected with a LOX1 overexpression plasmid & control vector. ROS levels were determined by DCFH-DA assay in MLE-12 cells treated by TGF- β 1, TGF- β 1 plus exosome, TGF- β 1 plus exosome & vector, & TGF- β 1 plus exosome & LOX1 overexpression plasmid (n = 3). (b) Detection of cellular mtDNA/18sRNA in each of the above cell groups (n = 3). (c) The expression of LOX1, caspase 3, mtDNA damage markers SIRT3 & ACO2, & NLRP3 was measured by western blotting in each of the above cell groups. (d) The expression of the same signal cascades including LOX1, caspase 3, SIRT3, ACO2, & NLRP3 was confirmed in an animal model with pulmonary fibrosis by western blot assay. Data is shown as the means \pm SD, n \geq 3. \square \square p < 0.01. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31949877>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: Aconitase 2 Antibody [NBP1-90264] - The regulation mechanism of LOX1 on alveolar epithelial cell apoptosis & fibrosis. (a) Cells were transfected with a LOX1 overexpression plasmid & control vector. ROS levels were determined by DCFH-DA assay in MLE-12 cells treated by TGF- β 1, TGF- β 1 plus exosome, TGF- β 1 plus exosome & vector, & TGF- β 1 plus exosome & LOX1 overexpression plasmid (n = 3). (b) Detection of cellular mtDNA/18sRNA in each of the above cell groups (n = 3). (c) The expression of LOX1, caspase 3, mtDNA damage markers SIRT3 & ACO2, & NLRP3 was measured by western blotting in each of the above cell groups. (d) The expression of the same signal cascades including LOX1, caspase 3, SIRT3, ACO2, & NLRP3 was confirmed in an animal model with pulmonary fibrosis by western blot assay. Data is shown as the means \pm SD, n \geq 3. \square \square p < 0.01. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31949877>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: Aconitase 2 Antibody [NBP1-90264] - The regulation mechanism of LOX1 on alveolar epithelial cell apoptosis & fibrosis. (a) Cells were transfected with a LOX1 overexpression plasmid & control vector. ROS levels were determined by DCFH-DA assay in MLE-12 cells treated by TGF- β 1, TGF- β 1 plus exosome, TGF- β 1 plus exosome & vector, & TGF- β 1 plus exosome & LOX1 overexpression plasmid (n = 3). (b) Detection of cellular mtDNA/18sRNA in each of the above cell groups (n = 3). (c) The expression of LOX1, caspase 3, mtDNA damage markers SIRT3 & ACO2, & NLRP3 was measured by western blotting in each of the above cell groups. (d) The expression of the same signal cascades including LOX1, caspase 3, SIRT3, ACO2, & NLRP3 was confirmed in an animal model with pulmonary fibrosis by western blot assay. Data is shown as the means \pm SD, n \geq 3. \square \square p < 0.01. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31949877>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Sun L, Zhu M, Feng W, et al. Exosomal miRNA Let-7 from Menstrual Blood-Derived Endometrial Stem Cells Alleviates Pulmonary Fibrosis through Regulating Mitochondrial DNA Damage Oxidative Medicine and Cellular Longevity 2019-12-17 [PMID: 31949877] (WB, Mouse)

Ilgen P, Stoldt S, Conradi LC et al. STED Super-Resolution Microscopy of Clinical Paraffin-Embedded Human Rectal Cancer Tissue. PLoS One 2014-01-01 [PMID: 25025184] (Human)

Cantu D, Fulton RE, Drechsel DA et al. Mitochondrial aconitase knockdown attenuates paraquat-induced dopaminergic cell death via decreased cellular metabolism and release of iron and H₂O₂. J Neurochem 2011-07-01 [PMID: 21517855]





Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NBP1-90264

NBP1-90264PEP	Aconitase 2 Recombinant Protein Antigen
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP1-90264

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications

