

# Product Datasheet

## Aconitase 2 Antibody - BSA Free NBP1-32781

Unit Size: 0.1 ml

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

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**NBP1-32781**

Aconitase 2 Antibody - BSA Free

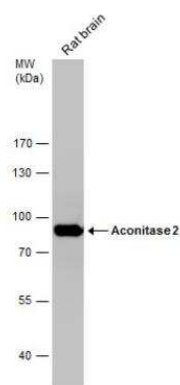
Product Information	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.01% Thimerosal
<b>Isotype</b>	IgG
<b>Purity</b>	Antigen Affinity-purified
<b>Buffer</b>	0.1M Tris, 0.1M Glycine, 10% Glycerol
<b>Target Molecular Weight</b>	85 kDa

Product Description	
<b>Description</b>	Novus Biologicals Rabbit Aconitase 2 Antibody - BSA Free (NBP1-32781) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and IP. Anti-Aconitase 2 Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Rabbit
<b>Gene ID</b>	50
<b>Gene Symbol</b>	ACO2
<b>Species</b>	Human, Mouse, Rat
<b>Reactivity Notes</b>	Xenopus laevis (86%).
<b>Immunogen</b>	Recombinant protein encompassing a sequence within the center region of human Aconitase 2. The exact sequence is proprietary.

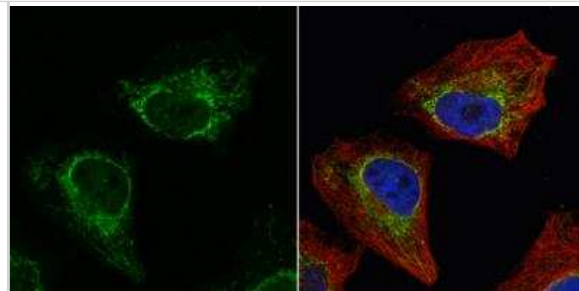
Product Application Details	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunoprecipitation
<b>Recommended Dilutions</b>	Western Blot 1:5000-1:20000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunoprecipitation 1:100-1:500, Immunohistochemistry-Paraffin 1:100-1:1000

**Images**

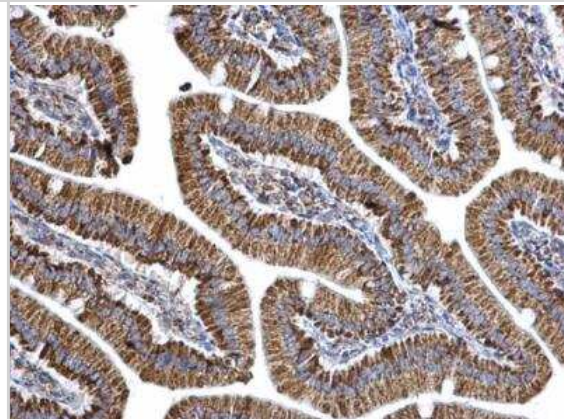
Western Blot: Aconitase 2 Antibody [NBP1-32781] - Rat tissue extract (50 ug) was separated by 7.5% SDS-PAGE, and the membrane was blotted with Aconitase 2 antibody [C1C3] diluted at 1:10000.



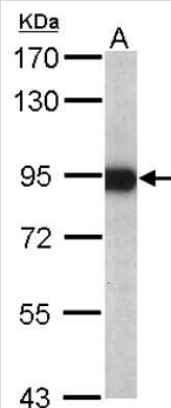
Immunocytochemistry/Immunofluorescence: Aconitase 2 Antibody [NBP1-32781] - HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min. Green: Aconitase 2 protein stained by Aconitase 2 antibody [C1C3] diluted at 1:500. Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody [114] diluted at 1:500. Blue: Hoechst 33342 staining.



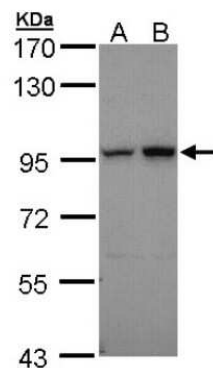
Immunohistochemistry-Paraffin: Aconitase 2 Antibody [NBP1-32781] - Paraffin-embedded mouse duodenum. Aconitase 2 antibody [C1C3] dilution: 1:500.



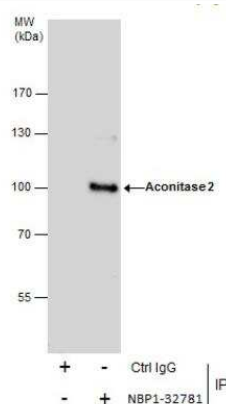
Western Blot: Aconitase 2 Antibody [NBP1-32781] - Sample (20 ug of whole cell lysate) A: mouse brain 7. 5% SDS PAGE, antibody diluted at 1:20000.



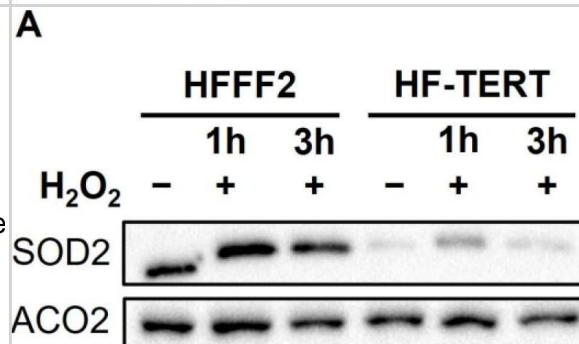
Western Blot: Aconitase 2 Antibody [NBP1-32781] - Sample (30 ug of whole cell lysate) A: 293T B: A431 7.5% SDS PAGE, antibody diluted at 1:10000.



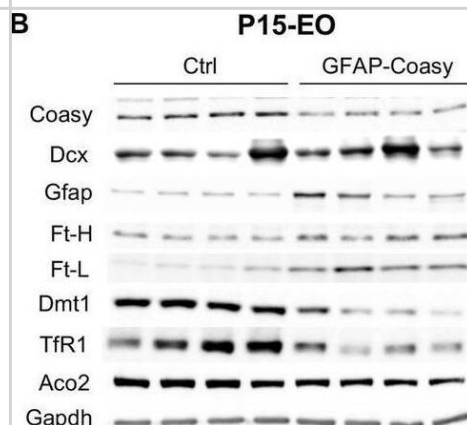
Immunoprecipitation: Aconitase 2 Antibody [NBP1-32781] - HeLa whole cell extracts using 5 ug of Aconitase 2 antibody [C1C3]. Western blot analysis was performed using Aconitase 2 antibody [C1C3]. EasyBlot anti-Rabbit IgG was used as a secondary reagent.



SOD2 protein level evaluated after H<sub>2</sub>O<sub>2</sub> treatment. (A) Western blot of SOD2 and Aconitase 2 (ACO2, used as a control) in HFFF2 and HF-TERT cells at 1 or 3 h of recovery after H<sub>2</sub>O<sub>2</sub> treatment. (B) Quantification of SOD2 protein level in both cell lines after H<sub>2</sub>O<sub>2</sub> treatment. Data represent mean  $\pm$  SEM. Statistical analysis is performed between HF-TERT and HFFF2 untreated cells, or between treated and untreated HF-TERT. \*  $p < 0.05$ ; \*\*\*  $p < 0.001$  by t-test. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/36901881>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Molecular and biochemical characterization of GFAP-Coasy mice. (A) Relative Coasy mRNA expression at 15 days and 6 months in Ctrl (n = 4) and GFAP-Coasy (n = 4) mice brain, tested by qPCR. (B) Representative images of Western blot analysis and (C–J) densitometric quantification of (C) Coasy, (D) Dcx, (E) Gfap, (F) Ft-H, (G) Ft-L, (H) Dmt1, (I) TfR1, and (J) Aco2 at 15 days and 6 months in Ctrl and GFAP-Coasy mice brain. (K) Specific activity of mitochondrial respiratory chain complex I, expressed as nmoles/min/mg of protein. \*  $p < 0.05$ , \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$  (two-way ANOVA). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/39301217>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Cavestro C, D'Amato M, Colombo MN et al. CoA synthase plays a critical role in neurodevelopment and neurodegeneration *Frontiers in Cellular Neuroscience* 2024-09-05 [PMID: 39301217]

Marinaccio J, Micheli E, Udroui I et al. TERT Extra-Telomeric Roles: Antioxidant Activity and Mitochondrial Protection *International journal of molecular sciences* 2023-02-23 [PMID: 36901881] (WB, Human)

Ciccarone F, De Falco P, Ciriolo MR Aconitase 2 sensitizes MCF-7 cells to cisplatin eliciting p53-mediated apoptosis in a ROS-dependent manner *Biochem. Pharmacol.* 2020-08-18 [PMID: 32818504] (WB, Human)

Ciccarone F, Di Leo L, Lazzarino G, et al. Aconitase 2 inhibits the proliferation of MCF-7 cells promoting mitochondrial oxidative metabolism and ROS/FoxO1-mediated autophagic response *Br. J. Cancer* 2019-12-10 [PMID: 31819175] (WB, Human)

Tammineni P, Anugula C, Mohammed F et al. The import of the transcription factor STAT3 into mitochondria depends on GRIM-19, a component of the electron transport chain *J Biol Chem* 2012-12-27 [PMID: 23271731] (WB, Rat)



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General: novus@novusbio.com

### **Products Related to NBP1-32781**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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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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