

# Product Datasheet

## CS Citrate Synthase Antibody - BSA Free NBP2-13878

Unit Size: 0.1 ml

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

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

### Publications: 3

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NBP2-13878](http://www.novusbio.com/NBP2-13878)

Updated 2/23/2025 v.20.1

Earn rewards for product  
reviews and publications.

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NBP2-13878](http://www.novusbio.com/reviews/destination/NBP2-13878)



**NBP2-13878**

CS Citrate Synthase Antibody - BSA Free

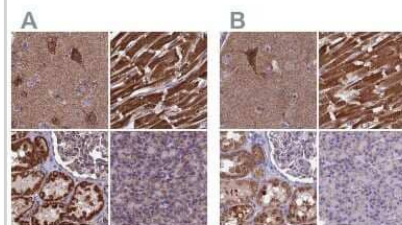
Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium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

Product Description	
Host	Rabbit
Gene ID	1431
Gene Symbol	CS
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 29290465).
Immunogen	This antibody was developed against a recombinant protein corresponding to the amino acids: ADLIPKEQARIKTFRQQHGKTVVGQITVDDMMYGGMRGMKGLVYETSVLDPDE GIRFRGFSIPECQKLLPKAKGGEEPLPEGLFWLLVTGHIPTTEEQVSWL

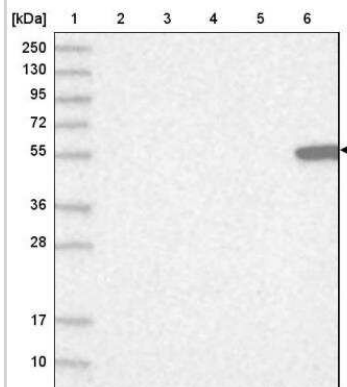
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Immunohistochemistry 1:200 - 1:500, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:200 - 1:500
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. For ICC/IF Fixation/Permeabilization: PFA/Triton X-100.

**Images**

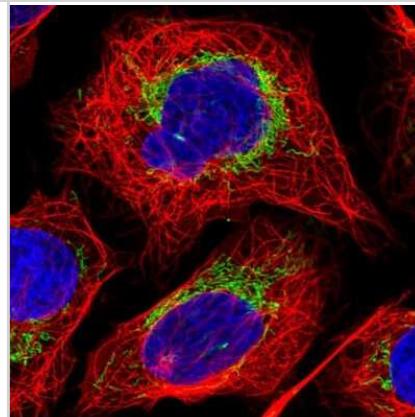
Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human cerebral cortex, heart muscle, kidney and pancreas using Anti-CS antibody NBP2-13878 (A) shows similar protein distribution across tissues to independent antibody NBP2-13877 (B).



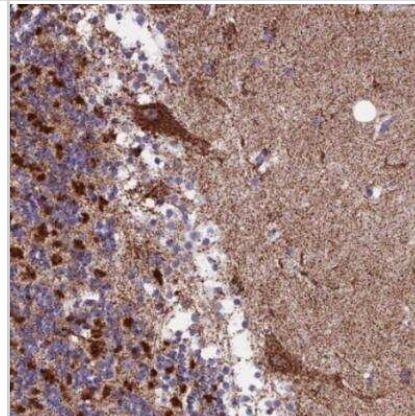
Western Blot: CS Citrate Synthase Antibody [NBP2-13878] - Lane 1: Marker [kDa] 250, 130, 95, 72, 55, 36, 28, 17, 10. Lane 2: Human cell line RT-4. Lane 3: Human cell line U-251MG sp. Lane 4: Human plasma (IgG/HSA depleted). Lane 5: Human liver tissue. Lane 6: Human tonsil tissue



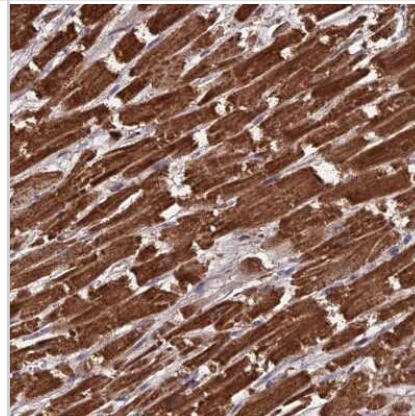
Immunocytochemistry/Immunofluorescence: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human cell line U-2 OS shows localization to mitochondria. Antibody staining is shown in green.



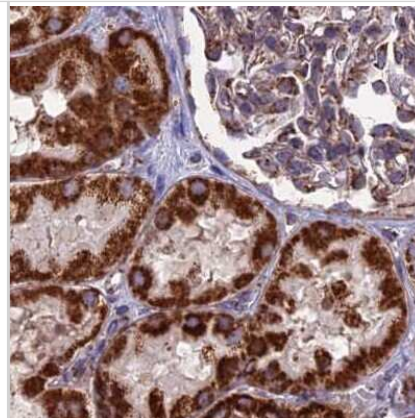
Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human cerebellum shows moderate to strong cytoplasmic positivity in purkinje cells.



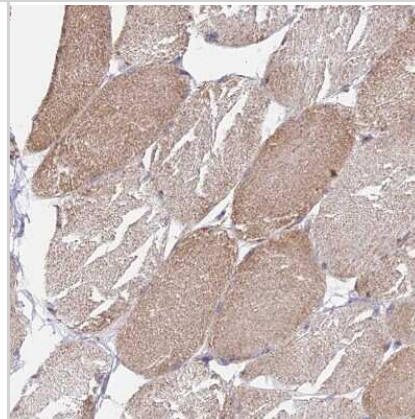
Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human heart muscle shows high expression.



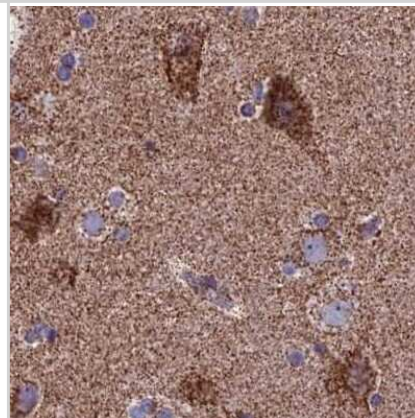
Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human kidney.



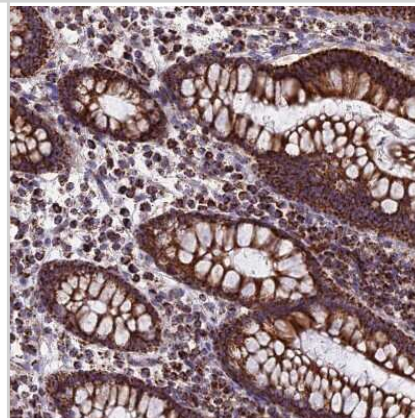
Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human skeletal muscle shows weak to moderate cytoplasmic positivity in myocytes.



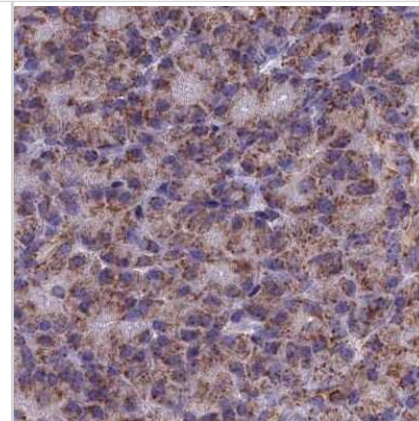
Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human cerebral cortex.



Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human colon shows strong cytoplasmic positivity in glandular cells.



Immunohistochemistry-Paraffin: CS Citrate Synthase Antibody [NBP2-13878] - Staining of human pancreas.



## Publications

Uttkarsh Ayyangar, Aneesh Karkhanis, Heather Tay, Aliya Farissa Binte Afandi, Oindrila Bhattacharjee, Lalitha KS, Sze Han Lee, James Chan, Srikala Raghavan Metabolic rewiring of macrophages by epidermal-derived lactate promotes sterile inflammation in the murine skin *The EMBO Journal* 2024-02-28 [PMID: 38418556]

Russo GL, Sonsalla G, Natarajan P et al. CRISPR-Mediated Induction of Neuron-Enriched Mitochondrial Proteins Boosts Direct Glia-to-Neuron Conversion *Cell Stem Cell* 2020-11-16 [PMID: 33202244]

Ingold I, Berndt C, Schmitt S et al. Selenium Utilization by GPX4 Is Required to Prevent Hydroperoxide-Induced Ferroptosis. *Cell* 2017-12-16 [PMID: 29290465] (Mouse)



### **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 NBP2-13878**

---

NBP2-13878PEP	CS Citrate Synthase 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](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NBP2-13878](http://www.novusbio.com/reviews/submit/NBP2-13878)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

