

Product Datasheet

SERCA2 ATPase Antibody (2A7-A1) NB300-581

Unit Size: 100 uL

Store at -20C. Avoid freeze-thaw cycles.

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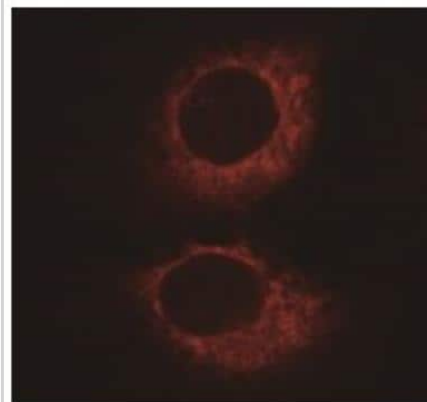


NB300-581**SERCA2 ATPase Antibody (2A7-A1)**

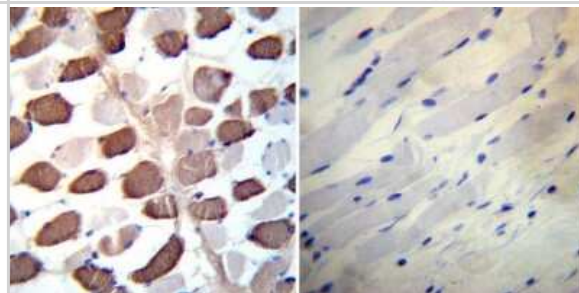
Product Information	
Unit Size	100 uL
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2A7-A1
Preservative	0.05% Sodium Azide
Isotype	IgG2a
Purity	Unpurified
Buffer	Ascites
Product Description	
Description	Novus Biologicals Mouse SERCA2 ATPase Antibody (2A7-A1) (NB300-581) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF, Simple Western and IP. Anti-SERCA2 ATPase Antibody: Cited in 17 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	488
Gene Symbol	ATP2A2
Species	Human, Mouse, Rat, Porcine, Amphibian, Canine, Guinea Pig, Rabbit, Sheep
Reactivity Notes	Sheep reactivity reported in scientific literature (PMID: 21289077). Amphibian reactivity reported in scientific literature (PMID: 12022876). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
Specificity/Sensitivity	Detects sarcoplasmic or endoplasmic reticulum calcium (SERCA) 2 ATPase. NB300-581 recognizes the SERCA2a and SERCA2b isoforms identically. However, the antibody does not recognize the skeletal muscle (SERCA1) or housekeeping isoforms (SERCA3).
Immunogen	Purified canine cardiac sarcoplasmic reticulum vesicles.
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000, Simple Western 1:10 - 1:250, Flow Cytometry 1 ug / 10 ⁶ cells, Immunohistochemistry 1:100, Immunocytochemistry/ Immunofluorescence 1:10 - 1:500, Immunoprecipitation 1:10 - 1:500, Immunohistochemistry-Paraffin 1 ug/mL, Immunohistochemistry-Frozen 1:100
Application Notes	WB: Detects an approx. 110 kDa protein representing SERCA2 ATPase in rat cardiac tissue.

Images

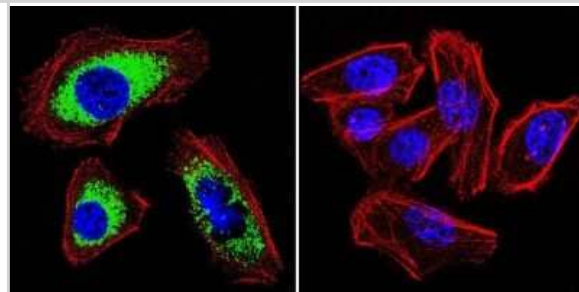
Immunocytochemistry/Immunofluorescence: SERCA2 ATPase Antibody (2A7-A1) [NB300-581] - HeLa cells. Primary antibody at 1:100, secondary antibody: goat-anti mouse IgG AlexaFluor 568 at 1:100. ICC/IF image submitted by a verified customer review.



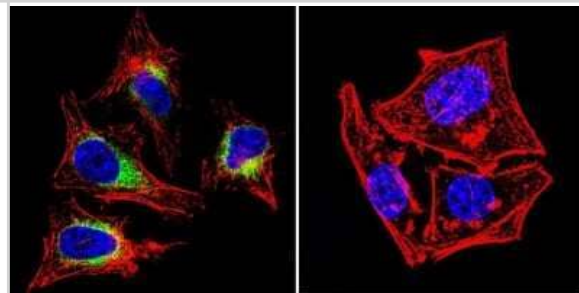
Immunohistochemistry-Paraffin: SERCA2 ATPase Antibody (2A7-A1) [NB300-581] - Both normal and cancer biopsies of deparaffinized Human skeletal muscle tissues.



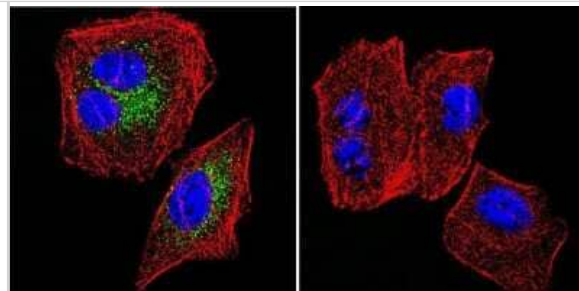
Immunocytochemistry/Immunofluorescence: SERCA2 ATPase Antibody (2A7-A1) [NB300-581] - SERCA2 ATPase staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing SERCA2 ATPase at a dilution of 1:100-1:200 over night at 4C, washed with PBS and incubated with a DyLight-488 conjugated.



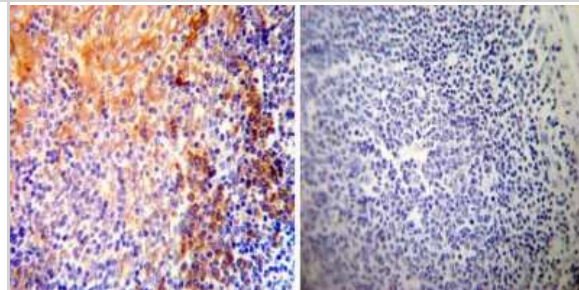
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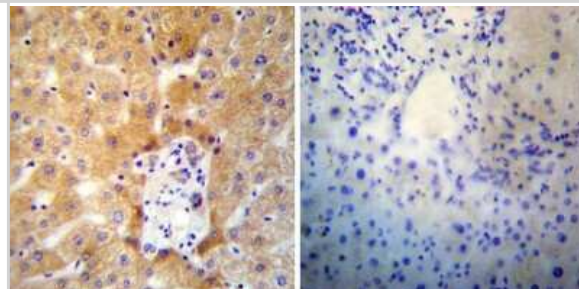
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Immunohistochemistry-Paraffin: SERCA2 ATPase Antibody (2A7-A1) [NB300-581] - Both normal and cancer biopsies of deparaffinized Human tonsil tissues.



Immunohistochemistry-Paraffin: SERCA2 ATPase Antibody (2A7-A1) [NB300-581] - Both normal and cancer biopsies of deparaffinized Human liver tissues.



Publications

Courjaret RJ, Wagner LE, Ammouri RR et al. Ca²⁺ tunneling architecture and function are important for secretion J Cell Biol 2024-11-05 [PMID: 39499286]

Tanton H, Sewastianik T, Seo HS et al. A novel beta-catenin/BCL9 complex inhibitor blocks oncogenic Wnt signaling and disrupts cholesterol homeostasis in colorectal cancer Science advances 2022-04-29 [PMID: 35486727] (ICC/IF)

Hammad AS, Yu F, Botheju WS Et al. Phosphorylation of STIM1 at ERK/CDK sites is dispensable for cell migration and ER partitioning in mitosis Cell calcium 2021-10-23 [PMID: 34715400] (ICC/IF, Mouse)

Uchida Y, Yamamoto Y, Sakisaka T Trans-2-enoyl-CoA reductase limits Ca²⁺ accumulation in the endoplasmic reticulum by inhibiting the Ca²⁺ pump SERCA2b The Journal of biological chemistry 2021-01-19 [PMID: 33482198]

Xie D, Geng L, Xiong K et al. Cold-Inducible RNA-Binding Protein Prevents an Excessive Heart Rate Response to Stress by Targeting Phosphodiesterase Circ. Res. 2020-03-26 [PMID: 32212953] (WB)

Chung YJ, Luo A, Park KC et al. Iron deficiency anemia reduces cardiac contraction by downregulating RyR2 channels and suppressing SERCA pump activity JCI Insight 2019-02-19 [PMID: 30779710] (WB, Mouse)

Schroeder MA, Ali MA, Hulikova A et al. Extramitochondrial domain rich in carbonic anhydrase activity improves myocardial energetics. Proc Natl Acad Sci U S A 2013-03-05 [PMID: 23431149] (WB, Rat)

Klug D, Boule S, Wissocque L et al. Right Ventricular Pacing With Mechanical Dyssynchrony Causes Apoptosis Interruptus and Calcium Mishandling Can J Cardiol 2012-10-10 [PMID: 23062666] (WB, Porcine)

Prasad AM et al. Phenylephrine hypertrophy, Ca²⁺-ATPase (SERCA2), and Ca²⁺ signaling in neonatal rat cardiac myocytes. Am J Physiol Cell Physiol;292(6):C2269-75. 2007-06-01 [PMID: 17287366] (ICC/IF)

Movsesian MA et al. Ca(2+)-transporting ATPase, phospholamban, and calsequestrin levels in nonfailing and failing human myocardium. Circulation;90(2):653-7. 1994-08-01 [PMID: 8044934] (WB)

Khan SA et al. Neuronal nitric oxide synthase negatively regulates xanthine oxidoreductase inhibition of cardiac excitation-contraction coupling. Proc Natl Acad Sci U S A;101(45):15944-8. 2004-11-09 [PMID: 15486091] (IP)

Krizaj D, Liu X, Copenhagen DR et al. Expression of calcium transporters in the retina of the tiger salamander (*Ambystoma tigrinum*). J Comp Neurol. 2004-08-01 [PMID: 15236230] (IF/IHC)

More publications at <http://www.novusbio.com/NB300-581>



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

Limitations

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