

## Anti-SERCA3 ATPase/ATP2A3 Antibody Picoband®

Catalog Number: RP1055

### About ATP2A3

Sarcoplasmic/endoplasmic reticulum calcium ATPase 3, also known as SERCA3, is an enzyme that in humans is encoded by the ATP2A3 gene. It is mapped to 17p13.2. This gene encodes one of the SERCA Ca<sup>2+</sup>-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of cells. ATP2A3 expression was originally described as non-muscular, but was recently observed in cardiomyocyte. What's more, the expression of ATP2A3 was significantly reduced or lost in colon carcinomas compared with normal colonic epithelial cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen, and is involved in calcium sequestration associated with muscular excitation and contraction.

### Overview

Product Name	Anti-SERCA3 ATPase/ATP2A3 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SERCA3 ATPase/ATP2A3 Antibody catalog # RP1055. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q93084

### Technical Details

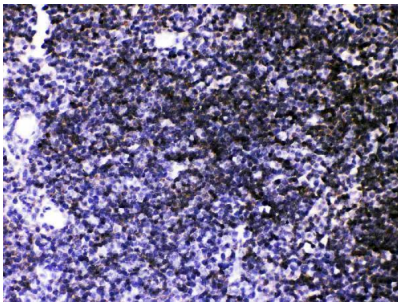
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ATP2A3, different from the related mouse sequence by five amino acids, and from the related rat sequence by six amino acids.
-----------	---

Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat, Human Western blot, 0.1-0.5ug/ml, Mouse, Rat, Human

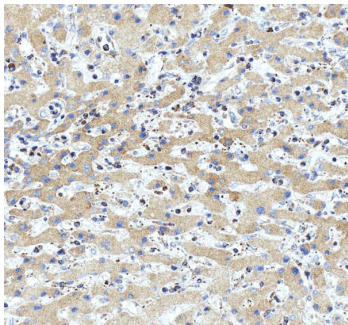
## Anti-SERCA3 ATPase/ATP2A3 Antibody Picoband® (RP1055) Images



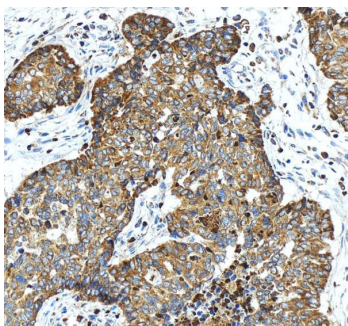
Anti-ATP2A3 antibody, RP1055, Western blotting All lanes:  
Anti ATP2A3 (RP1055) at 0.5ug/ml Lane 1: Rat Skeletal  
Muscle Tissue Lysate at 50ug Lane 2: Mouse Skeletal Muscle  
Tissue Lysate at 50ug Predicted bind size: 114KD Observed  
bind size: 114KD



Anti-ATP2A3 antibody, RP1055, IHC(P) IHC(P): Mouse Thymus  
Tissue

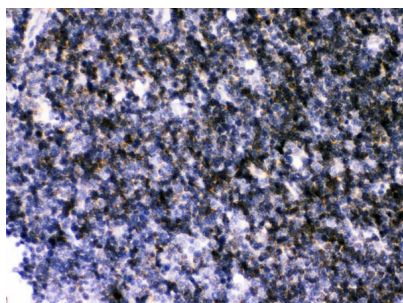


IHC analysis of SERCA3/ATP2A3 using anti-SERCA3/ATP2A3  
antibody (RP1055). SERCA3/ATP2A3 was detected in a  
paraffin-embedded section of human liver tissue. Heat  
mediated antigen retrieval was performed in EDTA buffer  
(pH 8.0, epitope retrieval solution). The tissue section was  
blocked with 10% goat serum. The tissue section was then  
incubated with 2 ug/ml rabbit anti-SERCA3/ATP2A3 Antibody  
(RP1055) overnight at 4°C. Peroxidase Conjugated Goat Anti-  
rabbit IgG was used as secondary antibody and incubated for  
30 minutes at 37°C. The tissue section was developed  
using HRP Conjugated Rabbit IgG Super Vision Assay Kit  
(Catalog # SV0002) with DAB as the chromogen.



IHC analysis of SERCA3/ATP2A3 using anti-SERCA3/ATP2A3  
antibody (RP1055). SERCA3/ATP2A3 was detected in a  
paraffin-embedded section of human liver cancer tissue.  
Heat mediated antigen retrieval was performed in EDTA  
buffer (pH 8.0, epitope retrieval solution). The tissue section  
was blocked with 10% goat serum. The tissue section was  
then incubated with 2 ug/ml rabbit anti-SERCA3/ATP2A3  
Antibody (RP1055) overnight at 4°C. Peroxidase Conjugated  
Goat Anti-rabbit IgG was used as secondary antibody and  
incubated for 30 minutes at 37°C. The tissue section was  
developed using HRP Conjugated Rabbit IgG Super Vision  
Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Anti-ATP2A3 antibody, RP1055, IHC(P) IHC(P): Rat Thymus  
Tissue



## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-SERCA3 ATPase/ATP2A3 Antibody

For Research Use Only. Not for use in diagnostic procedures.