

Anti-SERCA1 ATPase/ATP2A1 Antibody

Catalog Number: RP1053

About ATP2A1

SERCA1, also called ATP2A1, is an enzyme that in humans is encoded by the ATP2A1 gene. This gene encodes one of the SERCA Ca (2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. The SERCA1 gene is mapped to 16p11.2. 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 muscular excitation and contraction. It has been determined that the human SERCA1 gene is 26 kb long and contains 23 exons, of which can be alternatively spliced. Mutations in this gene cause some autosomal recessive forms of Brody disease, characterized by increasing impairment of muscular relaxation during exercise.

Overview

Product Name	Anti-SERCA1 ATPase/ATP2A1 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SERCA1 ATPase/ATP2A1 Antibody catalog # RP1053. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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	O14983

Technical Details

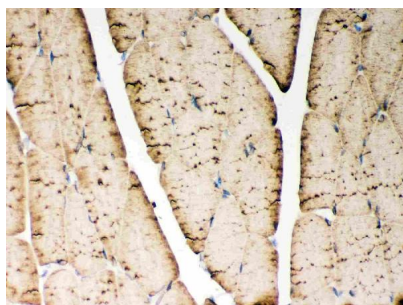
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human SERCA1 ATPase, different from the related mouse and rat sequences by three amino acids.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit 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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5ug/ml, Mouse, Rat, Human

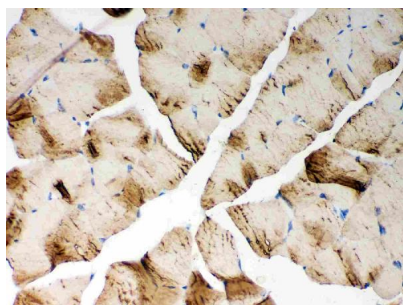
Anti-SERCA1 ATPase/ATP2A1 Antibody (RP1053) Images



Anti-SERCA1 ATPase antibody, RP1053, Western blotting
All lanes: Anti SERCA1 ATPase (RP1053) 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: 110KD
Observed bind size: 110KD



Anti-SERCA1 ATPase antibody, RP1053, IHC(P)
IHC(P): Rat Skeletal Muscle Tissue



Anti-SERCA1 ATPase antibody, RP1053, IHC(P)
IHC(P): Mouse Skeletal Muscle Tissue

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