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Anti-ATP2A3 Antibody
Catalog # ABO12738

Specification

Anti-ATP2A3 Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q93084
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Sarcoplasmic/endoplasmic reticulum calcium ATPase 3(ATP2A3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ATP2A3 Antibody - Additional Information

Gene ID 489

Other Names
Sarcoplasmic/endoplasmic reticulum calcium ATPase 3, SERCA3, SR Ca(2+)-ATPase 3, 3.6.3.8, Calcium pump 3, ATP2A3

Calculated MW
113977 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization
Nucleus membrane ; Multi-pass membrane protein . Endoplasmic reticulum membrane ; Multi-pass membrane protein . Sarcoplasmic reticulum membrane ; Multi-pass membrane protein .

Tissue Specificity
Found in most tissues. Most abundant in thymus, trachea, salivary gland, spleen, bone marrow, lymph node, peripheral leukocytes, pancreas and colon. Also detected in fetal tissues. Expressed in cell lineages of hematopoietic, epithelial, or embryonic origin and also expressed in several cancer cell lines. .

Protein Name
Sarcoplasmic/endoplasmic reticulum calcium ATPase 3

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human ATP2A3(1-30aa MEAAHLLPAADVLRHFSVTAEGGLSPAQVT), different from the related mouse sequence by five amino acids, and from the related rat sequence by six amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-ATP2A3 Antibody - Protein Information

Name ATP2A3 (HGNC:813)

Function
This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of calcium. Transports calcium ions from the cytosol into the sarcoplasmic/endoplasmic reticulum lumen. Contributes to calcium sequestration involved in muscular excitation/contraction.

Cellular Location
Nucleus membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Sarcoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location
Found in most tissues. Most abundant in thymus, trachea, salivary gland, spleen, bone marrow, lymph node, peripheral leukocytes, pancreas and colon. Also detected in fetal tissues Expressed in cell lineages of hematopoietic, epithelial, or embryonic origin and also expressed in several cancer cell lines

Anti-ATP2A3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ATP2A3 Antibody - Images

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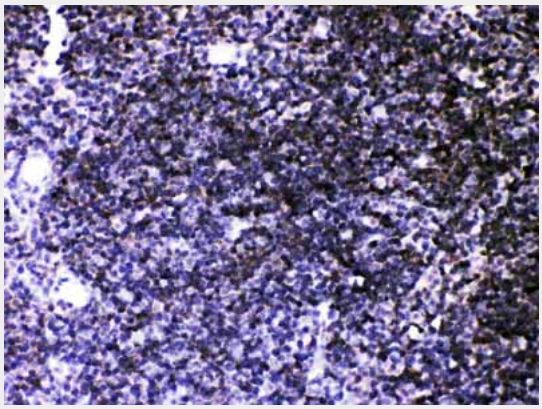
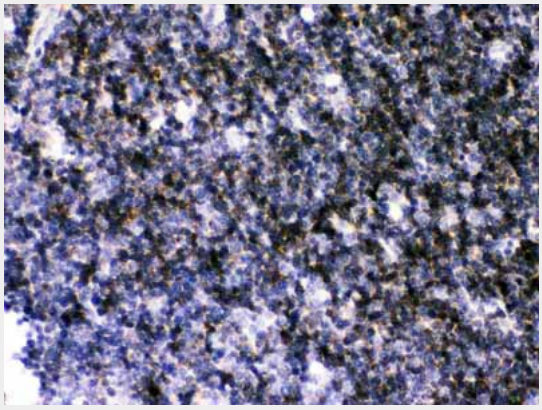
Anti- ATP2A3 antibody, ABO12738, Western blottingAll lanes: Anti ATP2A3 (ABO12738) at 0.5ug/mlLane 1: Rat Skeletal Muscle Tissue Lysate at 50ugLane 2: Mouse Skeletal Muscle Tissue Lysate at 50ugPredicted bind size: 114KDObserved bind size: 114KD



Anti- ATP2A3 antibody, ABO12738, IHC(P)IHC(P): Mouse Thymus Tissue



Anti- ATP2A3 antibody, ABO12738,IHC(P) IHC(P): Rat Thymus Tissue

Anti-ATP2A3 Antibody - Background

Sarcoplasmic/endoplasmic reticulum calcium ATPase 3, also known as SERCA3, is anenzyme that in humans is encoded by the ATP2A3 gene. It is mapped to 17p13.2. This gene encodes one of the SERCA Ca2+-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. Whatâ€™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.