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anti-ATP2A2 antibody (Middle Region)

2 Images



Publication



Go to Product page

| Overview | |
|-----------------------------|--|
| Quantity: | 100 μg |
| Target: | ATP2A2 |
| Binding Specificity: | AA 665-679, Middle Region |
| Reactivity: | Human, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Application: | Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)) |
| Product Details | |
| Purpose: | Rabbit IgG polyclonal antibody for Sarcoplasmic/endoplasmic reticulum calcium ATPase 2(ATP2A2) detection. Tested with WB, IHC-P in Human, Mouse, Rat. |
| Immunogen: | A synthetic peptide corresponding to a sequence in the middle region of human SERCA2 ATPase(665-679aa QRDACLNARCFARVE), identical to the related rat and mouse sequences. |
| Sequence: | QRDACLNARC FARVE |
| Isotype: | IgG |
| Cross-Reactivity (Details): | Predicted Cross Reactivity: mouse No cross reactivity with other proteins. Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities. |
| Characteristics: | Rabbit IgG polyclonal antibody for Sarcoplasmic/endoplasmic reticulum calcium ATPase 2(ATP2A2) detection. Tested with WB, IHC-P in Human, Mouse, Rat. |

Product Details

Gene Name: ATPase, Ca++ transporting, cardiac muscle, slow twitch 2

Protein Name: Sarcoplasmic/endoplasmic reticulum calcium ATPase 2(SERCA2/SR Ca(2+)-ATPase 2)

Purification:

Immunogen affinity purified.

Target Details

Target: ATP2A2

Alternative Name: ATP2A2 (ATP2A2 Products)

Background:

SERCA2(SARCOPLASMIC RETICULUM Ca(2+)-ATPase 2), also called ATP2A2, ATP2B, encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. They are closely related to the plasma membrane Ca(2+)-ATPases, or PMCAs. SERCA2 belongs to the large family of P-type cation pumps that couple ATP hydrolysis with cation transport across membranes. The SERCA2 gene is mapped on 12q24.11. SERCA2 was expressed in all specimens, with pronounced expression in the subnuclear aspect of basal epidermal keratinocytes. There was variable suprabasal expression. SERCA2 expression was also observed in the infundibulum and outer root sheath of hair follicles, germinative and mature cells of sebaceous glands, secretory coil and duct of eccrine glands, apocrine gland cells, and arrector pili muscle. In Darier disease skin, strong SERCA2 positivity was detected in the basal, suprabasal, and acantholytic lesional cells. Perilesional Darier disease skin was comparable to normal skin.

Synonyms: AT2A2_HUMAN antibody|ATP2A2 antibody|ATP2B antibody|ATPase Ca++ transporting cardiac muscle slow twitch 2 antibody|Calcium pump 2 antibody|Calcium-transporting ATPase sarcoplasmic reticulum type antibody|Calcium-transporting ATPase sarcoplasmic reticulum type slow twitch skeletal muscle isoform antibody|Cardiac Ca2+ ATPase antibody|DAR antibody|DD antibody|Endoplasmic reticulum class 1/2 Ca(2+) ATPase antibody|MGC45367 antibody|Sarcoplasmic/endoplasmic reticulum calcium ATPase 2 antibody|SERCA 2 antibody|SERCA2 antibody|slow twitch skeletal muscle isoform antibody|SR Ca(2+)-ATPase 2 antibody

UniProt:

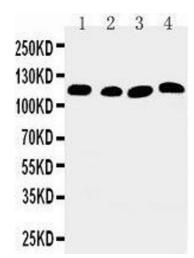
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Pathways:

Myometrial Relaxation and Contraction, ER-Nucleus Signaling, Ribonucleoside Biosynthetic Process

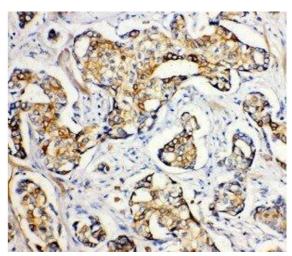
Application Details

| Application Notes: | WB: Concentration: 0.1-0.5 μg/mL, Tested Species: Human, Rat, Predicted Species: Mouse | | |
|--------------------|---|--|---|
| | IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Predicted Species: Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. | | |
| | | Optimal dilutions should be determined by end users. | |
| | | Comment: | Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by |
| | | | ABIN921231 in IHC(P). |
| | | Restrictions: | For Research Use only |
| | Handling | | |
| Format: | Lyophilized | | |
| Reconstitution: | Add 0.2 mL of distilled water will yield a concentration of 500 μg/mL. | | |
| Concentration: | 500 μg/mL | | |
| Buffer: | Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal, 0.05 mg | | |
| | Sodium azide. | | |
| Preservative: | Thimerosal (Merthiolate), Sodium azide | | |
| Precaution of Use: | This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND | | |
| | HAZARDOUS SUBSTANCES which should be handled by trained staff only. | | |
| Handling Advice: | Avoid repeated freezing and thawing. | | |
| Storage: | 4 °C/-20 °C | | |
| Storage Comment: | At -20°C for one year. After reconstitution, 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. | | |
| Expiry Date: | 12 months | | |
| Publications | | | |
| Product cited in: | Liu, Chen, Wang, Yang, Xue, Zhu: "Msi1 confers resistance to TRAIL by activating ERK in liver | | |
| | cancer cells." in: FEBS letters, Vol. 589, Issue 8, pp. 897-903, (2015) (PubMed). | | |



Western Blotting

Image 1. Anti-SERCA2 ATPase antibody, Western blotting Lane 1: Rat Skeletal Muscle Tissue Lysate Lane 2: Rat Kidney Tissue Lysate Lane 3: PANC Cell Lysate Lane 4: SMMC Cell Lysate



Immunohistochemistry

Image 2. Anti-SERCA2 ATPase antibody, IHC(P): Human Mammary Cancer Tissue