

SERCA2a pAb serum

Quality Control Certificate of Analysis

Catalogue No.: A010-20

Unit Size: 20 µl

Lot No: 0210-06

Background: SERCA2a is a Ca²⁺ pump located in the sarcoplasmic reticulum of cardiac and slow-twitch skeletal muscle. The enzyme transports Ca²⁺ from the cytoplasm into the SR using the hydrolysis of ATP as the energy source for this reaction. Two Ca²⁺ are transported for each ATP hydrolysed. This Ca²⁺ transport is the principal means of muscle relaxation in cardiac and slow-twitch skeletal muscle. The activity of SERCA2a is moderated by its interaction with phospholamban. SERCA2a is one isoform of SERCA2: this isoform differs from SERCA2b and SERCA2c at the extreme carboxy terminus only. Antibody A010-20 recognises the C-terminal sequence which distinguishes SERCA2a from SERCA2b and SERCA2c (Dally *et al.*, 2006).

Description: Lyophilised **Rabbit** polyclonal serum (A010-20) containing IgG antibody specific to SERCA2a

Immunogen: Synthetic peptide (C-LEPAILE₉₉₇) corresponding to amino acids at the extreme C-terminus of SERCA2a.

Antibody Isotype: IgG.

Antibody Purity: Raw Serum.

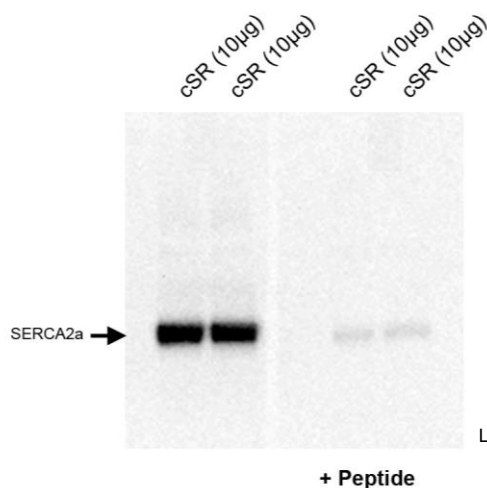
Vial Constituents: Lyophilised A010-12 Rabbit anti-serum (20 µl)

Specificity: The antibody recognises SERCA2a and binding is blocked in the presence of a peptide containing the epitope. The antibody reacts with SERCA2a from human, rat, mouse, rabbit, canine, and bovine species.

Storage Instructions: Lyophilised antibody is stable at 4°C when stored with desiccant. Reconstitute lyophilised powder in 20 µl of 18 MΩ H₂O, aliquot and store frozen at -80°C for 1 year. Avoid freeze - thaw cycles.

Tested Applications: **WB 1:5000**, ELISA and IHC microscopy

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Epitope	C L E P A I L E
Human	- L E P A I L E
Mouse	- L E P A I L E
Rat	- L E P A I L E
Rabbit	- L E P A I L E
Dog	- L E P A I L E
Chicken	- L E P A I L E
Cow	- L E P A I L E



Lane 1 - 4: 10 µg of canine cardiac Sarcoplasmic Reticulum (cSR)

A010-20 (1:5000)

1 µl in 5 ml of Tris buffer + 5% milk powder 16 hours at 4°C

Secondary antibody = Goat anti Rabbit HRP
Chemiluminescent detection: 30 second exposure

WB using 1:5000 SERCA2a anti-serum (A010-20) against 10µg of canine cardiac Sarcoplasmic Reticulum.
Primary Ab incubations performed +/- 1 µM immunising peptide. 6 % SDS-PAGE, PVDF membrane

Related Products:

SERCA1 Y/IF4 Antibody (A010-21AP), SERCA1 B/4H3 Antibody (A010-22AP)

Background References:

Colyer, J., & Wang J.H. (1991) *J. Biol. Chem.* 266, 17486-17493
Dally, S. et al. (2006) *Biochem. J.* 395, 249-258