

## SERCA2a pAb serum

### Quality Control Certificate of Analysis

Catalogue No.:A010-20

Unit Size: 25 µl

Lot No: 642213

**Background:** SERCA2a is a  $\text{Ca}^{2+}$  pump located in the sarcoplasmic reticulum of cardiac and slow-twitch skeletal muscle. The enzyme transports  $\text{Ca}^{2+}$  from the cytoplasm into the SR using the hydrolysis of ATP as the energy source for this reaction. Two  $\text{Ca}^{2+}$  are transported for each ATP hydrolysed. This  $\text{Ca}^{2+}$  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-LEPAILE<sub>997</sub>) corresponding to amino acids at the extreme C-terminus of SERCA2a.

**Antibody Isotype:** IgG.

**Antibody Purity:** Raw Serum.

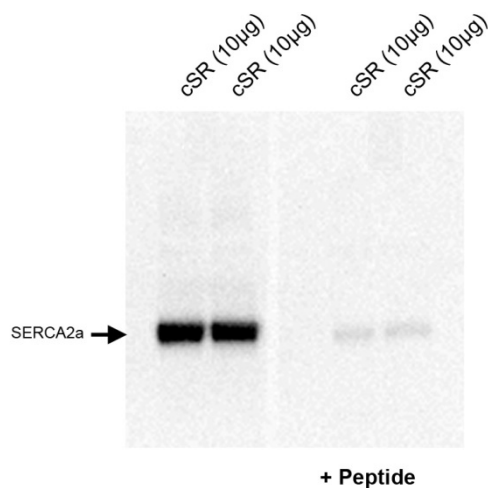
**Vial Constituents:** Lyophilised A010-12 Rabbit anti-serum (20 µl)

**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 25 µl of 18 MΩ H<sub>2</sub>O, aliquot and store frozen at -80°C for 1 year. Avoid freeze - thaw cycles.

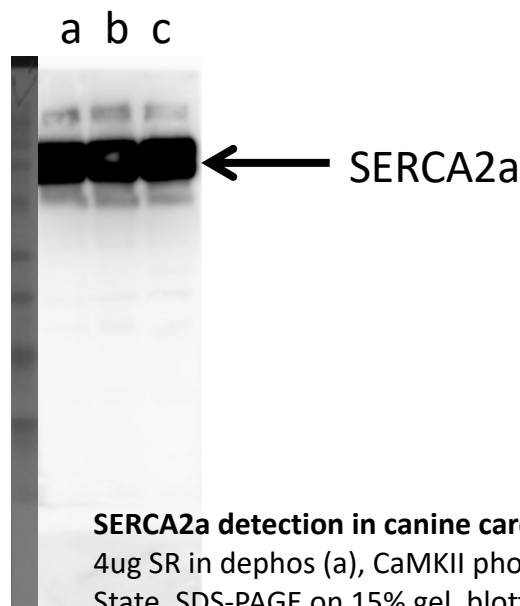
**Tested Applications:** WB 1:5000, ELISA and IHC microscopy

Epitope	990
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



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



**SERCA2a detection in canine cardiac SR**  
4ug SR in dephos (a), CaMKII phos (b), PKA phos (c) State. SDS-PAGE on 15% gel, blotted with A010-20 lot: 0814-01, 1:5000 dilution.

### 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