

SERCA2b pAb serum

Quality Control Certificate of Analysis

Catalogue No.: A010-24S

Unit Size: 20 µl

Lot No: 0214-03

Background: SERCA2b is a Ca²⁺ pump located in the sarcoplasmic reticulum or endoplasmic reticulum of many cells (smooth muscle, cardiac muscle, non-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 controlling cytoplasmic Ca²⁺. The activity of SERCA2b is moderated by its interaction with phospholamban. SERCA2b is one isoform of SERCA2: this isoform differs from SERCA2a and SERCA2c at the extreme carboxy terminus only. Antibody A010-24 recognises the C-terminal sequence which distinguishes SERCA2b from SERCA2a and SERCA2c (Dally *et al.*, 2006).

Description: Lyophilised **Rabbit** polyclonal serum (A010-24) containing IgG antibody specific to SERCA2b

Immunogen: Recombinant protein corresponding to amino acids at the extreme C-terminus of SERCA2b (989-1046).

Antibody Isotype: IgG.

Antibody Purity: Raw Serum.

Vial Constituents: Lyophilised A010-24 rabbit anti-serum (20 µl)

Specificity: The antibody recognises SERCA2b in recombinant, tissue and cellular samples. The antibody reacts with SERCA2b in all mammalian species as the sequence of the epitope is identical in all mammalian species (including human, rat, mouse, rabbit, sheep, pig, dog).

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 1:5,000

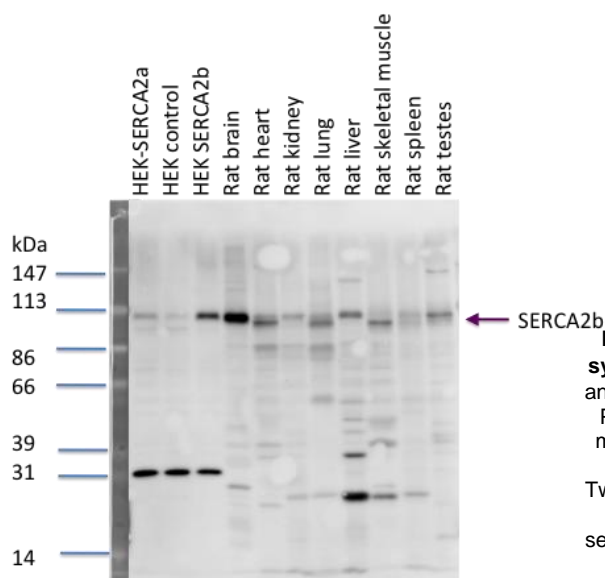


Figure 1: Recognition of SERCA2b in recombinant systems and rat tissue extracts. 2µg HEK microsomes and 20µg rat tissue homogenates were separate by SDS-PAGE in 10% gels. Proteins were transferred to PVDF membrane and SERCA2b identified by western blotting with A010-24S (lot 0214-03) 1:5,000 dilution in TBS-Tween20-5% milk protein (6 hour at RT). Immunoreactive proteins were visualised with peroxidase labelled secondary antibody and enhanced chemiluminescence. 1 minute exposure.

Related Products:

SERCA2a (A010-20, A010-23L), SERCA2b (A010-24S, A010-24L), SERCA1/2 Y/IF4 Antibody (A010-21AP), SERCA1 B/4H3 Antibody (A010-22AP)

Background References:

Eggmont, J.A. *et al.* (1990) *Biochem. J.*, 271, 649-653
Dally, S. *et al.* (2006) *Biochem. J.* 395, 249-258