

#4219 Store at -20°C

# ATP2A1/SERCA1 (L24) Antibody



100 µl  
(10 western blots)

**Orders** ■ 877-616-CELL (2355)  
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #487  
Swiss-Prot Acc. #O14983

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R	100 kDa	Rabbit**

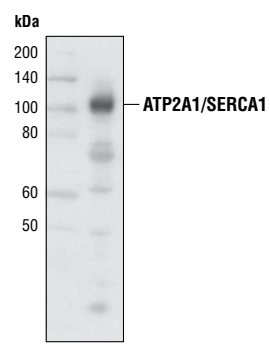
**Background:** Sarcoplasmic and endoplasmic reticulum Ca<sup>2+</sup> ATPases (SERCA) are members of a highly conserved family of Ca<sup>2+</sup> pumps (1). SERCA pumps transport Ca<sup>2+</sup> from the cytosol to the sarcoplasmic and endoplasmic reticulum lumen against a large concentration gradient (1). ATP2A1 (SERCA1) is a fast-twitch, skeletal muscle sarcoplasmic reticulum Ca<sup>2+</sup> ATPase (2). Mutations in the corresponding gene cause an autosomal recessive muscle disorder known as Brody myopathy, which is characterized by muscle cramping and impaired muscle relaxation associated with exercise (1-3).

**Specificity/Sensitivity:** ATP2A1/SERCA1 (L24) Antibody detects endogenous levels of total ATP2A1/SERCA1 protein.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu24 of human ATP2A1/SERCA1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

- (1) Hovnanian, A. (2007) *Subcell Biochem* 45, 337-63.
- (2) Odermatt, A. et al. (1996) *Nat Genet* 14, 191-4.
- (3) Odermatt, A. et al. (2000) *Hum Genet* 106, 482-91.



Western blot analysis of extract from human skeletal muscle using ATP2A1/SERCA1 (L24) Antibody.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**\*Species cross-reactivity is determined by western blot.**

**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**

Western blotting 1:1000

**For application specific protocols, please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com)**

**Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.**

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.