

## International Office

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**Research Use Only. Not for  
diagnostic or therapeutic use.**

## EB11450 - Goat Anti-SERCA2 / ATP2A2 Antibody

Size: 100µg specific antibody in 200µl



### Target Protein

**Principal Names:** ATP2B, ATPase, Ca<sup>++</sup> dependent, slow-twitch, cardiac muscle-2, ATPase, Ca<sup>++</sup> transporting, cardiac muscle, slow twitch 2, calcium pump 2, calcium-transporting ATPase sarcoplasmic reticulum type, slow twitch skeletal muscle isoform, cardiac Ca<sup>2+</sup> ATPase, DAR, DD, DKFZp686P0211, endoplasmic reticulum class 1/2 Ca(2+) ATPase, FLJ20293, FLJ38063, MGC45367, sarcoplasmic/endoplasmic reticulum calcium ATPase 2, SERCA2, SR Ca(2+)-ATPase 2, ATP2A2

**Official Symbol:** ATP2A2

**Accession Number(s):** NP\_001672.1; NP\_733765.1

**Human GeneID(s):** [488](#)

**Non-Human GeneID(s):** 11938 (mouse), 29693 (rat)

**Important Comments:** This antibody is expected to recognize both reported isoforms (NP\_001672.1; NP\_733765.1).

### Immunogen

Peptide with sequence DELNPSAQRDACLN, from the internal region of the protein sequence according to NP\_001672.1; NP\_733765.1.

Please note the [peptide](#) is available for sale.

### Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

### Applications Tested

**Peptide ELISA:** antibody detection limit dilution 1:128000.

**Western blot:** Approx. 110kDa band observed in Human, Mouse and Rat Heart lysates and in lysates of cell line A549, and approx. 100kDa in Mouse Smooth Muscle lysates (calculated MW of 110kDa according to Human NP\_001672.1, Mouse NP\_033852.1 and Rat NP\_001103609.1). Recommended concentration: 0.1-0.3µg/ml. Primary incubation 1 hour at room temperature.

**IHC:** Paraffin embedded Human Heart. Recommended concentration: 5µg/ml.

**Immunofluorescence:** Strong expression of the protein seen in the endoplasmic reticulum of HeLa cells. Recommended concentration: 10µg/ml.

### Species Reactivity

**Tested:** Human, Mouse, Rat

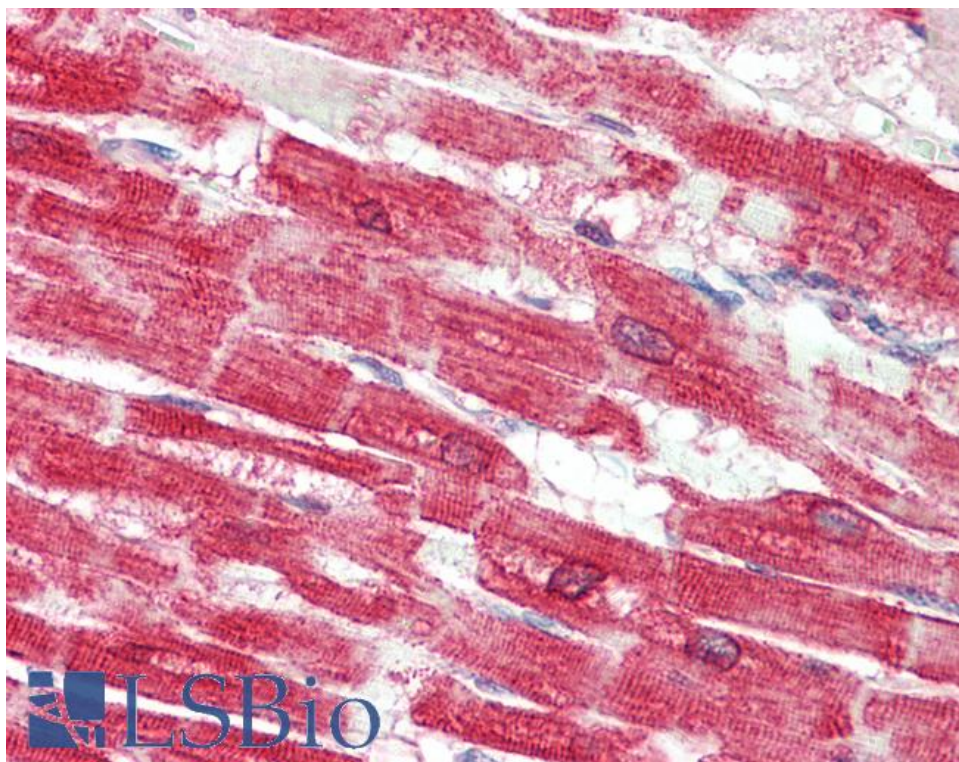
**Expected from sequence similarity:** Human, Mouse, Rat, Dog, Pig



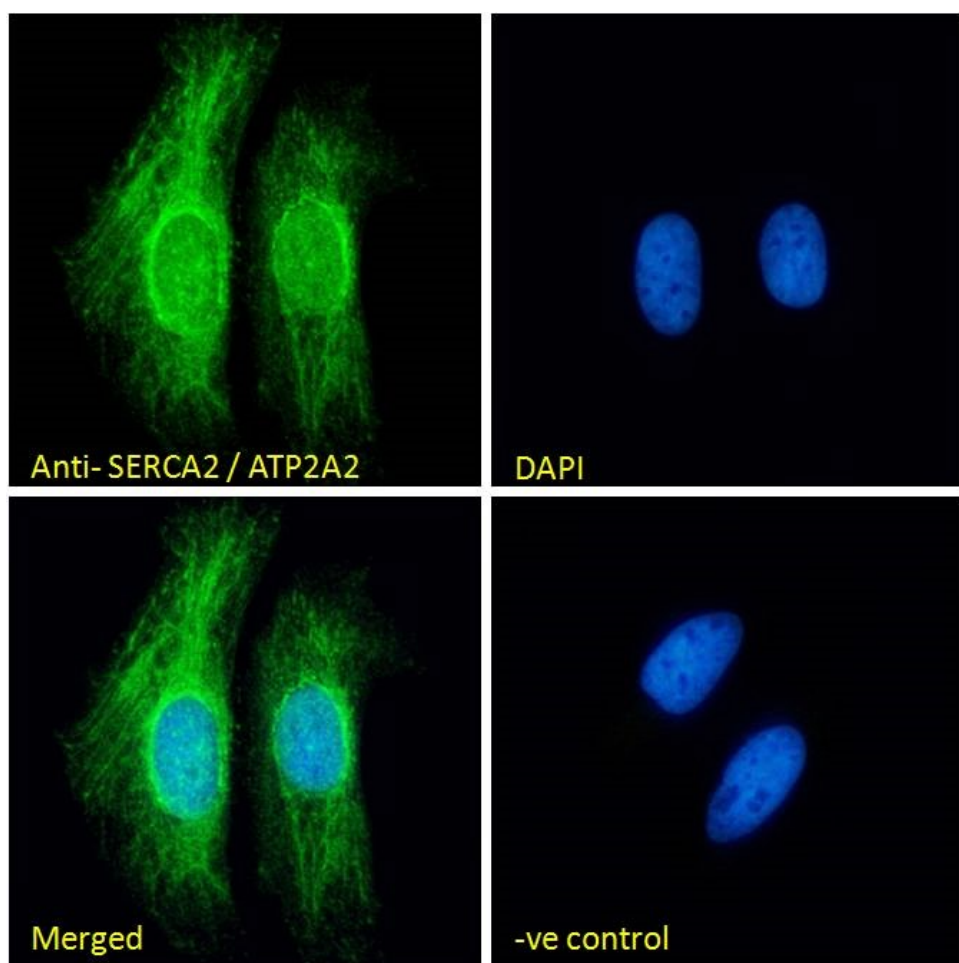
EB11450 (0.1µg/ml) staining of A549 cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB11450 (0.1µg/ml) staining of Human Heart (A), Mouse Heart (B), Rat Heart (C) and Mouse Smooth Muscle (D) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB11450 (5µg/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB11450 immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10µg/ml) followed by Alexa Fluor 488 secondary antibody (2µg/ml), showing

endoplasmic reticulum staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).