For Research Use Only

SERCA2/ATP2A2 Recombinant antibody

Catalog Number:86050-1-RR



Basic Information

Catalog Number: GenBank Accession Number:

86050-1-RR BC035588 Protein A purification

GeneID (NCBI): CloneNo.: 100ul , Concentration: 1000 $\mu g/ml$ by 488 250667D7

110-115 kDa

Nanodrop: **UNIPROT ID:** Recommended Dilutions: P16615 WB: 1:2000-1:10000 Rabbit IHC: 1:400-1:1600 Full Name: IF/ICC: 1:200-1:800

Isotype: ATPase, Ca++ transporting, cardiac muscle, slow twitch 2 IgG

Immunogen Catalog Number: Calculated MW: AG26177

1042 aa. 115 kDa Observed MW:

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: 37°C incubated mouse heart tissue, 37°C incubated mouse heart, rat heart, 37°C incubated rat

Purification Method:

IHC: mouse skeletal muscle tissue,

IF/ICC: C2C12 cells,

Background Information

 $ATP2A2, also known as SERCA2 (Sarco/endoplasmic reticulum-type calcium transport ATPase 2), is a {\tt 110\,kDa} and {\tt 110\,kDa}$ magnesium-dependent enzyme catalyzing the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Human SERCA2 gene gives rise to several alternatively spliced isoforms: SERCA2a, SERCA2b and SERCA2c. ATP2A2 is mainly expressed in the sarcoplasmic reticulum of muscle cells and the endoplasmic reticulum of most cell types.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

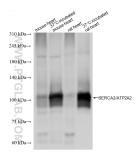
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

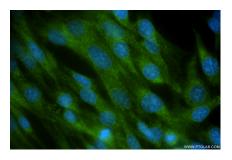
*** 20ul sizes contain 0.1% BSA

Selected Validation Data

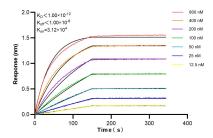


Various lysates were subjected to SDS PAGE followed by western blot with 86050-1-RR (SERCA2,ATP2A2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 86050-1-RR (SERCA2/ATP2A2 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed C2C12 cells using SERCA2/ATP2A2 antibody (86050-1-RR, Clone: 250667D7) at dilution of 1:0 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 86050-1-RR against Human SERCA2/ATP2A2 were performed. The affinity constant is below 1 pM.