Product Name: **KD-Validated ATP2A2 Recombinant Rabbit Monoclonal Antibody**
Catalog #: **KVAb01593**
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 114.8kDa

Antigen Information

Gene Name	ATP2A2
Alternative Names	ATP2A2; ATPase Sarcoplasmic/Endoplasmic Reticulum Ca2+ Transporting 2; SERCA2; Sarcoplasmic/Endoplasmic Reticulum Calcium ATPase 2; Calcium Pump 2; ATP2B; Endoplasmic Reticulum Class 1/2 Ca(2+) ATPase; SR Ca(2+)-ATPase; DAR; Calcium-Transporting ATPase Sarcoplasmic Reticulum Type, Slow Twitch Skeletal Muscle Isoform; ATPase, Ca++ Transporting, Cardiac Muscle, Slow Twitch 2; ATPase Ca++ Transporting Cardiac Muscle Slow Twitch 2; ATPase, Ca++ Dependent, Slow-Twitch, Cardiac Muscle-2; Cardiac Ca2+ ATPase; EC 7.2.2.10; EC 3.6.3.8; EC 3.6.3; DD
Gene ID	488.0
SwissProt ID	P16615
Immunogen	A synthesized peptide derived from human SERCA2

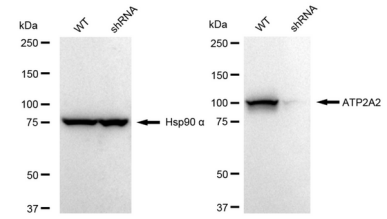
Background

This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of the skeletal muscle. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol into the sarcoplasmic reticulum lumen, and is involved in regulation of the contraction/relaxation cycle. Mutations in this gene cause Darier-White disease, also known as keratosis follicularis, an autosomal dominant skin disorder characterized by loss of adhesion between epidermal cells and abnormal keratinization. Other types of mutations in this gene have been associated with various forms of muscular dystrophies. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2019]

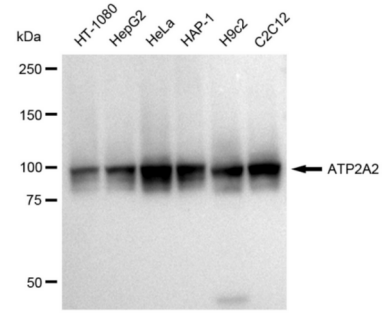
Research Area

Neuroscience

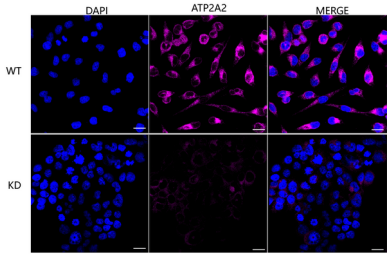
Image Data



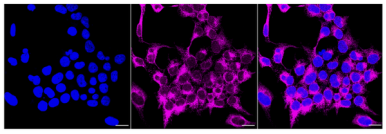
Western blotting analysis using ATP2A2 antibody (KVAb01593). ATP2A2 expression in wild type (WT) and ATP2A2 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ATP2A2 antibody (KVAb01593, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



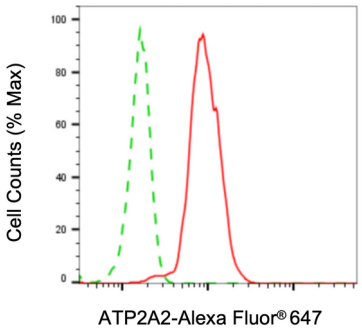
Western blotting analysis using ATP2A2 antibody (KVAb01593). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATP2A2 antibody (KVAb01593, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using ATP2A2 antibody (KVAb01593, 1:1,000), Top panel: wild-type (WT); Bottom panal: ATP2A2 shRNA knockdown (KD). Nuclei were stained blue with DAPI; ATP2A2 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of Hela cells with ATP2A2 antibody (KVAb01593, 1:1,000). Nuclei were stained blue with DAPI; ATP2A2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of ATP2A2 expression in HeLa cells using ATP2A2 antibody (KVAb01593, 1:2,000). Green, isotype control; red, ATP2A2.