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## ATP2A2 Recombinant Monoclonal Antibody

Product Code	CSB-RA076873A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P16615
Immunogen	A synthesized peptide derived from Human ATP2A2
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF, FC; Recommended dilution: IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer?Cardiovascular;Metabolism;Signal transduction
Gene Names	ATP2A2
Clone No.	20D1

Image



IHC image of CSB-RA076873A0HU diluted at 1:50 and staining in paraffin-embedded human heart tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.41% DAB.



Immunofluorescence staining of MCF7 with CSB-RA076873A0HU at 1:25, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 509-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).

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Overlay Peak curve showing Hela cells stained with CSB-RA076873A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific proteinprotein interactions followed by the antibody (1 $\mu$ g/1\*10<sup>6</sup>cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Antirabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1 $\mu$ g/1\*10<sup>6</sup>cells) used under the same conditions. Acquisition of >10,000 events was performed.

## Description

The ATP2A2 recombinant monoclonal antibody is meticulously produced through a series of steps. It all begins with in vitro cloning, where the genes responsible for both the heavy and light chains of the ATP2A2 antibody are seamlessly integrated into expression vectors. Following this, the expression vectors are introduced into host cells, allowing for the recombinant antibody's expression within a cell culture environment. Post-expression, the ATP2A2 recombinant monoclonal antibody is subjected to a stringent purification process, drawing on the capabilities of affinity chromatography for this purpose. A remarkable feature of this antibody is its specific reactivity with the human ATP2A2 protein. Furthermore, it showcases its versatility in various applications, including ELISA, IHC, IF, and FC.

ATP2A2 is an important calcium transporter protein found in the sarcoplasmic reticulum of muscle cells and the endoplasmic reticulum of skin cells. Its primary function is to regulate calcium ion concentrations within these cellular compartments, which, in turn, influences muscle contraction, skin barrier formation, calcium signaling, wound healing, and tissue homeostasis.