

Product Information

MemDX™ Membrane Protein Human ATP2A1 (ATPase sarcoplasmic/endoplasmic reticulum Ca²⁺ transporting 1) for Antibody Discovery

Cat. No.: **MP0077X**

This product is for research use only and is not intended for diagnostic use.

This product is a 135.7 kDa Human ATP2A1 membrane protein expressed in *in vitro* wheat germ expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

ATP2A1

Protein Length

Full-length

Molecular Weight

135.7 kDa

TMD

10

Sequence

MEAAHAKTTEECLAYFGVSETTGLTPDQVKRNLEKYGLNELPAEEGKTLWELVIEQFEDLLVRILLAAACISFVLAWFEEGEETITAFV

Product Description

Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

Expression Systems

in vitro wheat germ expression system

Tag

GST-tag at N-terminal

Form

Liquid

Purification

Glutathione Sepharose 4 Fast Flow

Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer

Storage

Store at +4°C for up to one week or several months at -80°C

Target

Target Protein

ATP2A1

Full Name

ATPase sarcoplasmic/endoplasmic reticulum Ca²⁺ transporting 1

Introduction

This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen, and is involved in muscular excitation and contraction. Mutations in this gene cause some autosomal recessive forms of Brody disease, characterized by increasing impairment of muscular relaxation during exercise. Alternative splicing results in three transcript variants encoding different isoforms

Alternative Names

ATP2A; SERCA1; ATPase, Ca⁺⁺ transporting, fast twitch 1; OTTHUMP00000162562; SR Ca(2+)-ATPase 1,calcium pump 1; calcium-transporting ATPase sarcoplasmic reticulum type; fast twitch skeletal muscle isoform; endoplasmic reticulum class 1/2 Ca(2+) ATPase,sarcoplasmic/endoplasm

Gene ID

[487](#)

UniProt ID

[O14983](#)