

# **Product Information**

# MemDX™ Membrane Protein Human ATP2A2 (ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 2) for Antibody Discovery

Cat. No.: MP0078X

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

This product is a 136.1 kDa Human ATP2A2 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**

ATP2A2

#### **Protein Length**

Full-length

# **Molecular Weight**

136.1 kDa

# **TMD**

10

### Sequence

MENAHTKTVEEVLGHFGVNESTGLSLEQVKKLKERWGSNELPAEEGKTLLELVIEQFEDLLVRILLLAACISFVLAWFEEGEETITAF\

# **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**

ATP2A2

#### **Full Name**

ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 2

#### Introduction

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

#### **Alternative Names**

ATP2B; DAR; DD; DKFZp686P0211; FLJ20293; FLJ38063; MGC45367; SERCA2; ATPase, Ca++ dependent, slow-twitch, cardiac muscle-2; ATPase, Ca++ transporting, slow twitch 2; SR Ca(2+)-ATPase 2, calcium pump 2; calcium-transporting ATPase sarcoplasmic reticulum type; slow twitch skeletal muscle isoform, cardiac Ca2+ ATPase, endoplasmic r

Gene ID

488

**UniProt ID** 

P16615