

Product Information

MemDX™ Membrane Protein Human ATP2B1 (ATPase plasma membrane Ca²⁺ transporting

1) Full Length

Cat. No.: **MPC0985K**

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

This product is a 134.6 kDa Human ATP2B1 membrane protein expressed in HEK293. 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

ATP2B1

Protein Length

Full length

Protein Class

Transporter

Molecular Weight

134.6 kDa

TMD

10

Sequence

MGDMANNSVAYSGVKNSLKEANHGDGFGITLAE LRALMELRSTDALRKIQ
ESYGDVYGICTKLKTSPNEGLSGNPADLERREAVFGKNFIPPKPKTFLQ
LVWEALQDVTLIILEIAAIVSLGLSFYQPPEGDNALCGEVSVEEGEGE
TGWIEGAAILLSVVCVVLVTAFNDWSKEKQFRGLQSRIEQEQKFTVIRGG
QVIQIPVADITVGDIAQVKYGDLLPADGILIQGNDLKIDESSLTGESDHV
KKSLDKDPLLLSGTHVMEGSGRMVVTAVGVNSQTGIIFTLLGAGGEEEEK
KDEKKKEKKNKKQDGA IENRNKAKAQDGAAMEMQPLKSEEGGDGDEKDKK
KANLPKKEKSVLQGKLT KLAVQIGKAGLLMSAITVILVLYFVIDTFWVQ
KRPWLAECTPIYIQYFVKFFIIGVTVLVAVPEGLPLAVTISLAYSVKKM
MKDNNLVRHLDACETMG NATAICSDKTGTLTMNRM TVVQAYINEKH YKKV
PEPEAIPPNILSYLVTG ISVNCAYTSKILPPEKEGGLPRHVGNKTECALL
GLLLDLKRDYQDVRNEIPEEALYKVYTFNSVRKSMSTVLKNSDGSYRIFS
KGASEIILKKCFKILSANG EAKVFRPRDRDDIVKTVIEPMASEGLRTICL
AFRDFPAGEPEPEWDNENDIVTGLTCIAVVGIEDPVRPEVPDAIKKCQRA
GITVRMVTGDNINTARAIATKCGILHPGEDFLCLEGKDFNRRIRNEKGEI
EQERIDKIWPKLRVLARSSPTDKHTLVKGIIDSTVSDQRQVAVTGDGTN
DGPALKKADVGFAMGIAGTDVAKEASDIILTDDNFTSIVKAVMWGRNVYD
SISKFLQFQLTVNVVAVIVAFTGACITQDSPLKAVQMLWVNLIMDTLASL
ALATEPPTESLLLRKPYGRNKPLISRTMMKNILGHAFYQLVVVFTLLFAG

EKFFDIDSGRNAPLHAPPSEHYTIVFNTFVLMQLFNEINARKIHGERNVF
EGIFNNAIFCTIVLGTFFVQIIIVQFGGKPFSCSELSIEQWLWSIFLGMG
TLLWGQLISTIPTSRKFLKEAGHGTQKEEIPEEELAEDVEEIDHAEREL
RRGQILWFRGLNRIQTQIRVVNAFRSSLYEGLEKPESRSSIHNFMTTHPEF
RIEDSEPHIPLIDDTDAEDDAPTKRNSSPPPPSPNKNNNAVDSGIHLTIEM
NKSATSSSPGSPLHSLETSL

Product Description

Expression Systems

HEK293

Tag

8xHis and Flag tag at the C-terminus

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

ATP2B1

Full Name

ATPase plasma membrane Ca²⁺ transporting 1

Introduction

The protein encoded by this gene belongs to the family of P-type primary ion transport ATPases characterized by the formation of an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cells against very large concentration gradients and play a critical role in intracellular calcium homeostasis. The mammalian plasma membrane calcium ATPase isoforms are encoded by at least four separate genes and the diversity of these enzymes is further increased by alternative splicing of transcripts. The expression of different isoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, suggesting that these pumps are functionally adapted to the physiological needs of particular cells and tissues. This gene encodes the plasma membrane calcium ATPase isoform 1. Alternatively spliced transcript variants encoding different isoforms have been identified.

Alternative Names

PMCA1; PMCA1kb; plasma membrane calcium-transporting ATPase 1; ATPase, Ca⁺⁺ transporting, plasma membrane 1; plasma membrane calcium pump; ATP2B1; ATPase plasma membrane Ca²⁺ transporting 1

Gene ID

[490](#)

UniProt ID

[P20020](#)