

## Product Information

### MemDX™ Membrane Protein Human KCNA4 (Potassium voltage-gated channel subfamily A member 4) Full Length

Cat. No.: **MPC0580K**

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

This product is a 73.2 kDa Human KCNA4 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

KCNA4

##### Protein Length

Full length

##### Protein Class

Transporter; Ion channel

##### Molecular Weight

73.2 kDa

##### TMD

6

##### Sequence

MEVAMVSAESSGCNSHMPYGYAAQARARERERLAHSRAAAAAAVAAATAA  
VEGSGGGGGSHHHHQSRACTSHDPQSSRGSRRRRRQRSEKKKAHYRQS  
SFPHCSDLMPSGSEEKILRELSEEEEEEEEEEEEEEGRFYYSEDDHGDE  
CSYTDLLPQDEGGGGYSSVRYSDCCERVVINVSGLRFETQMKTLAQFPET  
LLGDPEKRTQYFDPLRNEYFFDRNRPSFDAILYYYQSGGRLKRPVNVFPD  
IFTEEVKFYQLGEEALLKFREDEGFVREEEDRALPENEFKKQIWLLFEYP  
ESSSPARGIAIVSVLVILISIVIFCLETLPEFRDDRDLVMAISAGGHGGL  
LNDTSAPHLENSGHTIFNDPFFIVETVCIVWFSFEFVVRFCFACPSQALFF  
KNIMNIIDIVSILPYFITLGTDLAQQQGGGNGQQQQAMSFALRIIRLVR  
VFRIFKLSRHSKGLQILGHTLRASMRELGLLIFFLFIGVILFSSAVYFAE  
ADEPTTHFQSIPTDAFWWAVVTMTTVGYGDMKPITVGGKIVGSLCAIAGVL  
TIALPVPVIVSNFNFYHRETENEEQTQLTQNAVSCPYLPSNLLKKFRSS  
TSSSLGDKSEYLEMEEGVKESLCAKEEKCQKGDDSETDKNNCSNAKAVE  
TDV

#### Product Description

## Expression Systems

HEK293

## Tag

Based on specific requirements

## 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

KCNA4

### Full Name

Potassium voltage-gated channel subfamily A member 4

### Introduction

Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in *Drosophila*, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the A-type potassium current class, the members of which may be important in the regulation of the fast repolarizing phase of action potentials in heart and thus may influence the duration of cardiac action potential.

### Alternative Names

HK1; HBK4; PCN2; HPCN2; HUKII; KCNA8; KV1.4; KCNA4L; MCIDDS; potassium voltage-gated channel subfamily A member 4; cardiac potassium channel; fetal skeletal muscle potassium channel; potassium channel 2; potassium channel, voltage gated shaker related subfamily A, member 4; rapidly inactivating potassium channel; shaker-related potassium channel Kv1.4

type A potassium channel; voltage-gated K(+) channel HuKII; voltage-gated potassium channel HBK4; voltage-gated potassium channel HK1; voltage-gated potassium channel subunit Kv1.4; KCNA4; Potassium voltage-gated channel subfamily A member 4

### Gene ID

[3739](#)

### UniProt ID

[P22459](#)