

Product Information

MemDX™ Membrane Protein Human KCNA4 (Potassium voltage-gated channel subfamily A member 4) Expressed *in vitro* E.coli expression system, Full Length

Cat. No.: **MPX2698K**

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

This product is a Human KCNA4 membrane protein expressed *in vitro* E.coli 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

KCNA4

Protein Length

Full Length

Protein Class

Ion channel, Transport

TMD

6

Sequence

MEVAMVSAESSGCNSHMPYGYAAQARARERERLAHSRAAAAAAVAAATAAVEGSGGSGGGSHHHHQSRGACTSHDPQSSRGS

Product Description

Expression Systems

in vitro E.coli expression system

Tag

10xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

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

KCNA4; HK1; HBK4; PCN2; HPCN2; HUKII; KCNA8; KV1.4; KCNA4L; MCIDDS; 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; Potassium voltage-gated channel subfamily A member 4

Gene ID

[3739](#)

UniProt ID

[P22459](#)