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Product Information

MemDX™ Membrane Protein Human KCNA3 (Potassium voltage-gated channel subfamily A member 3) Expressed *in vitro E.coli* expression system, Full Length

Cat. No.: **MPX2826K**
This product is for research use only and is not intended for diagnostic use.

This product is a Human KCNA3 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
KCNA3

Protein Length
Full Length

Protein Class
Ion channel, Transport

TMD
6

Sequence
MDERLSLLRSPPPPSARHRAHPPQRPASSGGAHTLVNHGYAEPAAGRELPPDMTVVPGDHLLEPEVADGGGAPPQGGCGGGGC

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

KCNA3

Full Name

Potassium voltage-gated channel subfamily A member 3

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 delayed rectifier class, members of which allow nerve cells to efficiently repolarize following an action potential. It plays an essential role in T-cell proliferation and activation. This gene appears to be intronless and it is clustered together with KCNA2 and KCNA10 genes on chromosome 1.

Alternative Names

KCNA3; MK3; HGK5; HLK3; PCN3; HPCN3; KV1.3; HUKIII; potassium channel 3; potassium channel, voltage gated shaker related subfamily A, member 3; potassium voltage-gated channel, shaker-related subfamily, member 3; type n potassium channel; voltage-gated K(+) channel HuKIII; voltage-gated potassium channel protein Kv1.3; voltage-gated potassium channel subunit Kv1.3; Potassium voltage-gated channel subfamily A member 3

Gene ID

3738

UniProt ID

P22001