

Product Information

MemDX™ Membrane Protein Human KCNA1 (Potassium voltage-gated channel subfamily A member 1) expressed in E.coli for Antibody Discovery

Cat. No.: **MP1374J**

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

This product is a 22.2 kDa Human KCNA1 membrane protein expressed in E.coli. 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

KCNA1

Protein Length

Partial (1-154aa)

Protein Class

Ion Channel

Molecular Weight

22.2 kDa

Sequence

MTVMSGENVDEASAAPGHPQDGSYPQADHDDHECCERVVINISGLRFETQLKTLAQFPNTLLGNPKKRMRYFDPLRNEYFFDRN

Product Description

Expression Systems

E.coli

Tag

N-6xHis

Form

Liquid or Lyophilized powder

Reconstitution

Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration).

Purity

>90% as determined by SDS-PAGE

Buffer

Liquid: Tris/PBS-based buffer, 5%-50% glycerol

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

Storage

Store at +4°C for up to one week or several months at -80°C

Target

Target Protein

KCNA1

Full Name

Potassium voltage-gated channel subfamily A member 1

Introduction

This gene encodes a voltage-gated delayed potassium channel that is phylogenetically related to the *Drosophila* Shaker channel. The encoded protein has six putative transmembrane segments (S1-S6), and the loop between S5 and S6 forms the pore and contains the conserved selectivity filter motif (GYGD). The functional channel is a homotetramer. The N-terminus of the channel is associated with beta subunits that can modify the inactivation properties of the channel as well as affect expression levels. The C-terminus of the channel is complexed to a PDZ domain protein that is responsible for channel targeting. Mutations in this gene have been associated with myokymia with periodic ataxia (AEMK).

Alternative Names

AEMK; EA1; Episodic ataxia with myokymia; HBK1; HUK1; Kca1 1; Kcna1; KCNA1_HUMAN; Kcpvd; KV1.1; MBK1; mceph; MGC124402; MGC126782; MGC138385; MK1; MK1, mouse, homolog of KV1.1; Potassium channel protein 1; Potassium voltage gated channel shaker related subfamily member 1; Potassium voltage gated channel subfamily A member 1; Potassium voltage gated channel, shaker related subfamily, member 1 (episodic ataxia with myokymia); Potassium voltage-gated channel subfamily A member 1; RBK1; RCK1; Shak; Shaker related subfamily member 1; Voltage gated potassium channel subunit Kv1.1; Voltage-gated K(+) channel HuK1; Voltage-gated potassium channel HBK1; Voltage-gated potassium channel subunit Kv1.1

Gene ID

[3736](#)

UniProt ID

[Q09470](#)