

# Product Information

## **MemDX™ Membrane Protein Human KCND3 (Potassium voltage-gated channel subfamily D member 3) Expressed *in vitro* E.coli expression system, Full Length**

Cat. No.: **MPX2847K**

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

This product is a Human KCND3 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**

KCND3

#### **Protein Length**

Full Length

#### **Protein Class**

Ion channel, Transport

#### **TMD**

6

#### **Sequence**

MAAGVAAWLPFARAAAIGWMPVANCPMPLAPADKNKRQDELIVLNVSGRFQTWRTTLERYPDTLGSTEKEFFFNEDTKEYFFD

### 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

KCND3

#### Full Name

Potassium voltage-gated channel subfamily D member 3

#### Introduction

Voltage-gated potassium (Kv) 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, shal-related subfamily, members of which form voltage-activated A-type potassium ion channels and are prominent in the repolarization phase of the action potential. This member includes two isoforms with different sizes, which are encoded by alternatively spliced transcript variants of this gene.

#### Alternative Names

KCND3; KV4.3; SCA19; SCA22; BRGDA9; KCND3L; KCND3S; KSHIVB; potassium channel, voltage gated Shal related subfamily D, member 3; potassium ionic channel Kv4.3; potassium voltage-gated channel long; potassium voltage-gated channel, Shal-related subfamily, member 3; sha1-related potassium channel Kv4.3; voltage-gated K<sup>+</sup> channel; voltage-gated potassium channel subunit Kv4.3; Potassium voltage-gated channel subfamily D member 3

#### Gene ID

[3752](#)

#### UniProt ID

[Q9UK17](#)