

# Product Information

## **MemDX™ Membrane Protein Human KCND1 (Potassium voltage-gated channel subfamily D member 1) Expressed *in vitro* E.coli expression system, Full Length**

Cat. No.: **MPX2844K**

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

This product is a Human KCND1 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

KCND1

#### Protein Length

Full Length

#### Protein Class

Ion channel, Transport

#### TMD

6

#### Sequence

MAAGLATWLPFARAAVGVWLPLAQQLPPAPGVKASRGDEVLVVNVSGRRFETWKNTLD RYPDTLLGSSEKEFFYDADSGEYFFD

### Product Description

#### Expression Systems

*in vitro* E.coli expression system

#### Tag

10xHis and SUMO tag

#### 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

KCND1

#### Full Name

Potassium voltage-gated channel subfamily D member 1

#### Introduction

This gene encodes a multipass membrane protein that comprises the pore subunit of the voltage-gated A-type potassium channel, which functions in the repolarization of membrane action potentials. Activity of voltage-gated potassium channels is important in a number of physiological processes, among them the regulation of neurotransmitter release, heart rate, insulin secretion, and smooth muscle contraction.

#### Alternative Names

KCND1; KV4.1; Shal-type potassium channel; potassium channel, voltage gated Shal related subfamily D, member 1; potassium voltage-gated channel, Shal-related subfamily, member 1; voltage-gated potassium channel subunit Kv4.1; Potassium voltage-gated channel subfamily D member 1

#### Gene ID

[3750](#)

#### UniProt ID

[Q9NSA2](#)