

# Product Information

## **MemDX™ Membrane Protein Human KCND1 (Potassium voltage-gated channel subfamily D member 1) expressed in E.coli for Antibody Discovery**

Cat. No.: **MP1372J**

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

This product is a 29.7 kDa Human KCND1 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**

KCND1

#### **Protein Length**

Partial (410-647aa)

#### **Protein Class**

Ion Channel

#### **Molecular Weight**

29.7 kDa

#### **Sequence**

NFSRIYHQNQRADKRRAQQKVRLARIRLAKSGTTNAFLQYKQNGGLEDSSGSGEEQALCVRNRSFAEQQHHLHLCLEKTTCHFT

### 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

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; KCND1\_HUMAN; Kv4.1; mShal; OTTHUMP00000025805; OTTHUMP00000025806; Potassium voltage gated channel Shal related subfamily member 1; Potassium voltage gated channel subfamily D member 1; Potassium voltage-gated channel subfamily D member 1; Shal type potassium channel; Voltage gated potassium channel Kv4.1; Voltage gated potassium channel subunit Kv4.1; Voltage-gated potassium channel subunit Kv4.1

### Gene ID

[3750](#)

### UniProt ID

[Q9NSA2](#)