

# Product Information

## **MemDX™ Membrane Protein Human KCNJ1 (Potassium inwardly rectifying channel subfamily J member 1) expressed in E.coli for Antibody Discovery**

Cat. No.: **MP1369J**

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

This product is a 28.3 kDa Human KCNJ1 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**

KCNJ1

#### **Protein Length**

Partial (178-391aa)

#### **Protein Class**

Ion Channel

#### **Molecular Weight**

28.3 kDa

#### **Sequence**

ILAKISRPKKRAKTITFSKNAVISKRGGKLCLLIRVANLRKSLIGSHIYGKLLKTTVTPEGETIILDQININFVVDAGNENLFFISPLTIYHV

### 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

KCNJ1

### Full Name

Potassium inwardly rectifying channel subfamily J member 1

### Introduction

Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. It is activated by internal ATP and probably plays an important role in potassium homeostasis. The encoded protein has a greater tendency to allow potassium to flow into a cell rather than out of a cell. Mutations in this gene have been associated with antenatal Bartter syndrome, which is characterized by salt wasting, hypokalemic alkalosis, hypercalciuria, and low blood pressure. Multiple transcript variants encoding different isoforms have been found for this gene.

### Alternative Names

ATP regulated potassium channel ROM K; ATP sensitive inward rectifier potassium channel 1; ATP-regulated potassium channel ROM-K; ATP-sensitive inward rectifier potassium channel 1; Inward rectifier K(+) channel Kir1.1; inwardly rectifying K<sup>+</sup> channel; inwardly rectifying subfamily J member 1; IRK1\_HUMAN; KCNJ 1; KCNJ; Kcnj1; Kir 1.1; Kir1.1; OTTHUMP00000045938; Potassium channel; Potassium channel inwardly rectifying subfamily J member 1; potassium inwardly-rectifying channel J1; ROMK 1; ROMK 2; ROMK; ROMK1; ROMK2

### Gene ID

[3758](#)

### UniProt ID

[P48048](#)