

## Product Information

### **MemDX™ Membrane Protein Mouse Kcnj1 (Potassium inwardly-rectifying channel, subfamily J, member 1)**

Cat. No.: **MP0019F**

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

The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

#### Product Specifications

##### Host Species

Mouse

##### Target Protein

Kcnj1

##### Protein Length

Full Length

##### Protein Class

Channel

##### Molecular Weight

42.7 kDa

##### TMD

2

##### Sequence

MFKHLRRWFVTHIFGRSRQARLVSKDGRCNIEFGNVDAQSRFIFVVDIWTTVLDLKWRY  
KMTVFITAFLGSWFLFGLLWYVVAYVHKDLPEFYPPDNRTPCVENINGMTSAFLFSLETQ  
VTIGYGFRFVTEQCATAIFLLIFQSILGVIINSFMCGAILAKISRPKKRAKTITFSKNAV  
ISKRGGKLCLLIRVANLRKSLIGSHIYGKLLKTTITPEGETIILDQTNINFVVDAGNEN  
LFFISPLTIYHIIDHNSPFFHMAAETLSQQDFELVVFLDGTVESTSATCQVRTSYIPEEV  
LWGYRFVPIVSKTKEGKYRVDFHNFVKTEVEVTPHCLYNEKDARARMKRGYDNPNFV  
LSEVDETDQTQM

#### Product Description

##### Activity

To be tested

##### Application

Screening & display technologies, Structural biology

## Expression Systems

Cell-free expression system

## Tag

Histidine tag fused to the N-terminal end of the protein

## Protein Format

Proteoliposome

## Form

Powder

## Purification

Sucrose gradient

## Purity

>40% by SDS-Page and Coomassie Blue staining

## Buffer

Tris 50mM, pH 7.5

## 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

In the kidney, probably plays a major role in potassium homeostasis. Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. This channel is activated by internal ATP and can be blocked by external barium (By similarity).

### Alternative Names

ROMK, Romk2, Kir1.1

### Gene ID

[56379](#)

### UniProt ID

[O88335](#)