

# Product Information

## **MemDX™ Membrane Protein Human KCNJ11 (Potassium inwardly rectifying channel subfamily J member 11) Expressed *in vitro* E.coli expression system, Full Length**

Cat. No.: **MPX1765K**

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

This product is a Human KCNJ11 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

KCNJ11

#### Protein Length

Full Length

#### Protein Class

Ion channel, Transport

#### TMD

2

#### Sequence

MLSRKGIIP E EYVLTRLAEDPAEPRYRARQRRARFVSKKGNCNVAHKNIREQGRFLQDVFTTLVDLKWPH TLLIFTMSFLCSWLLFA

### 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

KCNJ11

#### Full Name

Potassium inwardly rectifying channel subfamily J member 11

#### 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. The encoded protein, which has a greater tendency to allow potassium to flow into a cell rather than out of a cell, is controlled by G-proteins and is found associated with the sulfonylurea receptor SUR. Mutations in this gene are a cause of familial persistent hyperinsulinemic hypoglycemia of infancy (PHHI), an autosomal recessive disorder characterized by unregulated insulin secretion. Defects in this gene may also contribute to autosomal dominant non-insulin-dependent diabetes mellitus type II (NIDDM), transient neonatal diabetes mellitus type 3 (TNDM3), and permanent neonatal diabetes mellitus (PNDM). Multiple alternatively spliced transcript variants that encode different protein isoforms have been described for this gene.

#### Alternative Names

KCNJ11; BIR; HHF2; PHHI; IKATP; PNDM2; TNDM3; KIR6.2; MODY13; ATP-sensitive inward rectifier potassium channel 11; beta-cell inward rectifier subunit; inward rectifier K(+) channel Kir6.2; inwardly rectifying potassium channel subfamily J member 11; inwardly rectifying potassium channel KIR6.2; inwardly-rectifying potassium channel subfamily J member 11; potassium channel inwardly rectifying subfamily J member 11; potassium channel, inwardly rectifying subfamily J member 11; potassium voltage-gated channel subfamily J member 11; Potassium inwardly rectifying channel subfamily J member 11

#### Gene ID

[3767](#)

#### UniProt ID

[Q14654](#)