

## Product Information

### MemDX™ Membrane Protein Human KCND1 (Potassium voltage-gated channel subfamily D member 1) Full Length

Cat. No.: **MPC0591K**

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

This product is a 71.3 kDa Human KCND1 membrane protein expressed in HEK293. 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

Transporter; Ion channel

##### Molecular Weight

71.3 kDa

##### TMD

6

##### Sequence

MAAGLATWLPFARAAAVGWLPLAQQLPPAPGVKASRGDEVLVVNVSGRR  
FETWKNTLD RYPDTLLGSSEKEFFYDADSGEYFFDRDPDMFRHVLNFYRT  
GRLHCPRQECIQAFDEELAFYGLVPELVGDCCLEEYRDRKKENAERLAED  
EEAEQAGDGPALPAGSSLRQRLWRAFENPHTSTAALVFYYVTGFFIAVSV  
IANVVETIPCRGSARRSSREQPCGERFPQAFFCMDTACVLIFTGEYLLRL  
FAAPSRRCRFLRSVMSLIDVVAILPYYIGLLVPKNDDVSGAFVTLRVFRVF  
RIFKFSRHSQGLRILGYTLKSCASELGFLFSLTMAIIIFATVMFYAEKG  
TNKTNFTSIPAAFYWTIVTMTTLGYGDMVPSTIAGKIFGSICSLSGVLVI  
ALPVPVIVSNFSRIYHQNRADKRRRAQQKVRLARIRLAKSGTTNAFLQYK  
QNGGLEDSGSGEEQALCVRNRSFAEQQHHLHLCLEKTTCHEFTDELTF  
EALGAVSPGGRTSRSTSVSSQPVGPGSLLSSCCPRRAKRRAIRLANSTAS  
VSRGSMQELDMLAGLRRSHAPQSRSSLNAKPHDSLNLNCDSDRDFVAAIIS  
IPTPPANTPDESQPSSPGGGGRAGSTLRNSSLGTPCLFPETVKISSL

#### Product Description

## Expression Systems

HEK293

## Tag

Based on specific requirements

## Protein Format

Detergent or based on specific requirements

## Form

Liquid

## 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

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; KCND1; Potassium voltage-gated channel subfamily D member 1

### Gene ID

[3750](#)

### UniProt ID

[Q9NSA2](#)