

# **Product Information**

# MemDX™ Membrane Protein Human KCNB1 (Potassium voltage-gated channel subfamily B member 1) Full Length

Cat. No.: MPC0585K

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

This product is a 95.8 kDa Human KCNB1 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**

KCNB1

#### **Protein Length**

Full length

# **Protein Class**

Transporter; Ion channel

# **Molecular Weight**

95.8 kDa

#### TMD

6

#### Sequence

MPAGMTKHGSRSTSSLPPEPMEIVRSKACSRRVRLNVGGLAHEVLWRTLD RLPRTRLGKLRDCNTHDSLLEVCDDYSLDDNEYFFDRHPGAFTSILNFYR TGRLHMMEEMCALSFSQELDYWGIDEIYLESCCQARYHQKKEQMNEELKR EAETLREREGEEFDNTCCAEKRKKLWDLLEKPNSSVAAKILAIISIMFIV LSTIALSLNTLPELQSLDEFGQSTDNPQLAHVEAVCIAWFTMEYLLRFLS SPKKWKFFKGPLNAIDLLAILPYYVTIFLTESNKSVLQFQNVRRVVQIFR IMRILRILKLARHSTGLQSLGFTLRRSYNELGLLILFLAMGIMIFSSLVF FAEKDEDDTKFKSIPASFWWATITMTTVGYGDIYPKTLLGKIVGGLCCIA GVLVIALPIPIIVNNFSEFYKEQKRQEKAIKRREALERAKRNGSIVSMNM KDAFARSIEMMDIVVEKNGENMGKKDKVQDNHLSPNKWKWTKRTLSETSS SKSFETKEQGSPEKARSSSSPQHLNVQQLEDMYNKMAKTQSQPILNTKES AAQSKPKEELEMESIPSPVAPLPTRTEGVIDMRSMSSIDSFISCATDFPE ATRFSHSPLTSLPSKTGGSTAPEVGWRGALGASGGRFVEANPSPDASQHS SFFIESPKSSMKTNNPLKLRALKVNFMEGDPSPLLPVLGMYHDPLRNRGS AAAAVAGLECATLLDKAVLSPESSIYTTASAKTPPRSPEKHTAIAFNFEA GVHQYIDADTDDEGQLLYSVDSSPPKSLPGSTSPKFSTGTRSEKNHFESS PLPTSPKFLRQNCIYSTEALTGKGPSGQEKCKLENHISPDVRVLPGGGAH **GSTRDQSI** 

# **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**

KCNB1

# **Full Name**

Potassium voltage-gated channel subfamily B member 1

# Introduction

Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in Drosophila, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shab-related subfamily. This member is a delayed rectifier potassium channel and its activity is modulated by some other family members.

#### **Alternative Names**

DRK1; DEE26; Kv2.1; potassium voltage-gated channel subfamily B member 1; delayed rectifier potassium channel 1; potassium voltage-gated channel, Shab-related subfamily, member 1; voltage-gated potassium channel subunit Kv2.1; KCNB1; Potassium voltage-gated channel subfamily B member 1

#### Gene ID

3745

#### **UniProt ID**

Q14721