

Product Information

MemDX™ Membrane Protein Human KCNJ3 (Potassium inwardly rectifying channel subfamily J member 3) Full Length

Cat. No.: **MPC0610K**

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

This product is a 56.6 kDa Human KCNJ3 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

KCNJ3

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

56.6 kDa

TMD

2

Sequence

MSALRRKFGDDYQVVTSSSSGSLQPQGPQDPQQQLVPKKRQRFVDKN
GRCNVQHGNLGSETSRYLSDLFTTLVDLKWRWNLFILTYTVAWLFMAS
MWWVIAYTRGDLNKAHVGNYPVCVANVYNFPSAFLFFIETEATIGYGYRY
ITDKCPEGIILFLFQSILGSIVDAFLIGCMFIKMSQPKKRAETLMFSEHA
VISM RDGKLTLMFRVGNLRNSHMSAQIRCKLLKSRQTPEGEFLPLDQLE
LDVG FSTGADQLFLVSPLTICHVIDAKSPFYDLSQRSMQTEQFEIVILE
GIVETTGMTCCARTSYTEDEV LWGHRFFPVISLEEGFFKVDYSQFHATFE
VPTPPYSVKEQEEMLLMSSPLIAPAITNSKERHNSVECLDGLDDITTKLP
SKLQKITGREDFPKLLRMSSTTSEKAYSLGDLPMKLQRISVPGNSEEK
LVSKTTKMLSDPMSQSVADLPPKLQKMAGGAARMEGNLPAKLRKMNSDRF
T

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**

KCNJ3

Full Name

Potassium inwardly rectifying channel subfamily J member 3

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 plays an important role in regulating heartbeat. It associates with three other G-protein-activated potassium channels to form a heteromultimeric pore-forming complex that also couples to neurotransmitter receptors in the brain and whereby channel activation can inhibit action potential firing by hyperpolarizing the plasma membrane. These multimeric G-protein-gated inwardly-rectifying potassium (GIRK) channels may play a role in the pathophysiology of epilepsy, addiction, Down's syndrome, ataxia, and Parkinson's disease. Alternative splicing results in multiple transcript variants encoding distinct proteins.

Alternative Names

KGA; GIRK1; KIR3.1; G protein-activated inward rectifier potassium channel 1; GIRK-1; inward rectifier K(+) channel Kir3.1; inward rectifier K+ channel KIR3.1; potassium channel, inwardly rectifying subfamily J member 3; potassium inwardly-rectifying channel subfamily J member 3 splice variant 1e; potassium voltage-gated channel subfamily J member 3; KCNJ3; Potassium inwardly rectifying channel subfamily J member 3

Gene ID

[3760](#)

UniProt ID

[P48549](#)