

Product Information

MemDX™ Membrane Protein Human KCNQ1 (Potassium voltage-gated channel subfamily Q member 1) Full Length

Cat. No.: **MPC0636K**

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

This product is a 74.6 kDa Human KCNQ1 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

KCNQ1

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

74.6 kDa

TMD

6

Sequence

MAAASSPPRAERKRWGWGRLPGARRGSAGLAKKCPFSLELAEGGPAGGAL
YAPIAPGAPGAPPASPAAPAAPPVASDLGPRPPVSLDPRVSIYSTRRPV
LARTHVQGRVYNFLERPTGWKCFVYHFAVFLIVLVCLIFSVLSTIEQYAA
LATGTLFWMEIVLVFFGTEYVVRWLWSAGCRSKYVGLWGRLRFARKPISI
IDLIVVVASMVVLCVSGSKGQVFATSAIRGIRFLQILRMLHVDRQGGTWRL
LGSVVFIRHQELITTLTYIGFLGLIFSSYFVYLAEKDAVNESGRVEFGSYA
DALWWGVVTVTTIGYGDKVPQTWVGKTIASCFVSFAISFFALPAGILGSG
FALKVQQKQRQKHFNRPQIPAAASLIQTAWRCYAAENPDSSTWKIYIRKAP
RSHTLLSPSPKPKKSVVVKKKKFKLDDKNGVTPGEKMLTVPHITCDPPEE
RRLDHFSVDGYDSSVRKSPTLLEVSMPHFMRTNSFAEDLDLEGETLLTPI
THISQLREHHRATIKVIRRMQYFVAKKKFQQARKPYDVRDVIEQYSQGH
NLMVRIKELQRRLDQSIGKPSLFISVSEKSKDRGSNTIGARLNRVEDKVT
QLDQRLALITDMLHQLLSLHGGSTPGSGGPPREGGAHITQPCGSGGSVDP
ELFLPSNTLPTYEQLTVPRRGPDEGS

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

KCNQ1

Full Name

Potassium voltage-gated channel subfamily Q member 1

Introduction

This gene encodes a voltage-gated potassium channel required for repolarization phase of the cardiac action potential. This protein can form heteromultimers with two other potassium channel proteins, KCNE1 and KCNE3. Mutations in this gene are associated with hereditary long QT syndrome 1 (also known as Romano-Ward syndrome), Jervell and Lange-Nielsen syndrome, and familial atrial fibrillation. This gene exhibits tissue-specific imprinting, with preferential expression from the maternal allele in some tissues, and biallelic expression in others. This gene is located in a region of chromosome 11 amongst other imprinted genes that are associated with Beckwith-Wiedemann syndrome (BWS), and itself has been shown to be disrupted by chromosomal rearrangements in patients with BWS. Alternatively spliced transcript variants have been found for this gene.

Alternative Names

LQT; RWS; WRS; LQT1; SQT2; ATFB1; ATFB3; JLNS1; KCNA8; KCNA9; Kv1.9; Kv7.1; KVLQT1; potassium voltage-gated channel subfamily KQT member 1; IKs producing slow voltage-gated; potassium channel subunit alpha KvLQT1; kidney and cardiac voltage dependend K⁺ channel; potassium channel, voltage gated KQT-like subfamily Q, member 1; potassium voltage-gated channel, KQT-like subfamily, member 1; slow delayed rectifier channel subunit; voltage-gated potassium channel subunit Kv7.1; KCNQ1; Potassium voltage-gated channel subfamily Q member 1

Gene ID

[3784](#)

UniProt ID

[P51787](#)