

Product Information

MemDX™ Membrane Protein Human KCNQ4 (Potassium voltage-gated channel subfamily Q member 4) Full Length

Cat. No.: **MPC0639K**

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

This product is a 77.1 kDa Human KCNQ4 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

KCNQ4

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

77.1 kDa

TMD

6

Sequence

MAEAPRRLGLGPPPGDAPRAELVALTAVQSEQGEAGGGGSPRRLGLLGS
PLPPGAPLPGPSGSGSACGQRSSAAHKRYRRLQNWVYNVLERPRGWAFV
YHVFIFLLVFSLVLSVLSTIQEHQELANECLLILEFVMIVVFGLEYIVR
VWSAGCCCRYRGWQGRFRFARKPFCVIDFIVFVASVAVIAAGTQGNIFAT
SALRSMRFLQILRMVRMDRRGGTWKLLGSVVYAHSKELITAWYIGFLVLI
FASFLVYLAEKDANSDFSSYADSLWWGTITLTIGYGDKTPHTWLGRVLA
AGFALLGISFFALPAGILGSGFALKVQEQHRQKHFEKRRMPAANLIQAAW
RLYSTDMSRAYLTATWYYYDSILPSFRELALLFEHVQARNGGLRPLEVR
RAPVPDGAPSRYPVATCHRPGSTSFCEGSSRMGIKDRIRMGSSQRRTG
PSKQHLAPPTMPTSPSSEQVGEATSPTKVQKSWSFNDRTRFRASLRKPR
TSAEDAPSEEVAAEESYQCELTVDIMPVKTIVIRSIRILKFLVAKRKFK
ETLRPYDVKDVEIQYSAGHLDMLGRIKSLQTRVDQIVGRGPGDRKAREKG
DKGPSDAEVVDEISMMGRVVKVEKQVQSIEHKLDLLGFYSRCLRSGTSA
SLGAVQVPLFDPDITSDYHSPVDHEDISVSAQTLISRSVSTNMD

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

KCNQ4

Full Name

Potassium voltage-gated channel subfamily Q member 4

Introduction

The protein encoded by this gene forms a potassium channel that is thought to play a critical role in the regulation of neuronal excitability, particularly in sensory cells of the cochlea. The current generated by this channel is inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. The encoded protein can form a homomultimeric potassium channel or possibly a heteromultimeric channel in association with the protein encoded by the KCNQ3 gene. Defects in this gene are a cause of nonsyndromic sensorineural deafness type 2 (DFNA2), an autosomal dominant form of progressive hearing loss. Two transcript variants encoding different isoforms have been found for this gene.

Alternative Names

DFNA2; KV7.4; DFNA2A; potassium voltage-gated channel subfamily KQT member 4; potassium channel KQT-like 4; potassium channel subunit alpha KvLQT4; potassium channel, voltage gated KQT-like subfamily Q, member 4; potassium voltage-gated channel, KQT-like subfamily, member 4; KCNQ4; Potassium voltage-gated channel subfamily Q member 4

Gene ID

[9132](#)

UniProt ID

[P56696](#)