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Product Information

MemDX™ Membrane Protein Human KCNQ4 (Potassium voltage-gated channel subfamily Q member 4) for Antibody Discovery

Cat. No.: **MP1237J**
This product is for research use only and is not intended for diagnostic use.

This product is a 71 kDa Human KCNQ4 membrane protein expressed in HEK293T. 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
Druggable Genome, Ion Channels: Potassium, Transmembrane

Molecular Weight
71 kDa

TMD
6

Sequence
MAEAPPRRLGLGPPPGDAPRAELVALTAVQSEQGEAGGGGSPRRLGLLGSPLPPGAPLPGPGSGSGSACG
QRSSAAHKRYRRLQNWVYNVLERPRGWAFVYHVFIFLLVFSCLVLSVLSTIQEHQELANECLLILEFVMI
VVFGLEYIVRVWSAGCCCRYRGWQGRFRFARKPFCVIDFIVFVASVAVIAAGTQGNIFATSALRSMRFLQ
ILRMVRMDRRGGTWKLLGSVVYAHSKELITAWYIGFLVLIFASFLVYLAEKDANSDFSSYADSLWWGTIT
LTTIGYGDKTPHTWLGRVLAAGFALLGISFFALPAGILGSGFALKVQEQHRQKHFEKRRMPAANLIQAAW
RLYSTDMSRAYLTATWYYYDSILPSFSSRMGIKDRIRMGSSQRRTGPSKQHLAPPTMPTSPSSEQVGEAT
SPTKVQKSWSFNDRTRFRASLRLKPRTSAEDAPSEEVAEEKSYQCELTVDDIMPAVKTVIRSIRILKFLV
AKRKFKETLRPYDVKDVIEQYSAGHLDMLGRIKSLQTRVDQIVGRGPGDRKAREKGDKGPSDAEVVDEIS
MMGRVVKVEKQVQSIEHKLDLLLGFYSRCLRSGTSASLGAVQVPLFDPDITSDYHSPVDHEDISVSAQTL
SISRSVSTNMD

Product Description

Expression Systems
HEK293T

Tag

C-Myc/DDK

Form

Liquid

Purification

Anti-DDK affinity column followed by conventional chromatography steps

Purity

> 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

Storage

Store at +4°C for up to one week or several months at -80°C

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; DFNA2A; KV7.4; 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

Gene ID

9132

UniProt ID

P56696