

Product Information

MemDX™ Membrane Protein Human KCNQ4 (Potassium voltage-gated channel subfamily Q member 4) Expressed *in vitro* E.coli expression system, Full Length

Cat. No.: **MPX2858K**

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

This product is a Human KCNQ4 membrane protein expressed *in vitro* E.coli expression system. 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

Ion channel, Transport

TMD

6

Sequence

MAEAPPRRLGLGPPPGDAPRAELVALTAVQSEQGEAGGGSPRRLGLLGSPLPPGAPLPGPGSGSGSACGQRSSAAHKRYRRL

Product Description

Expression Systems

in vitro E.coli expression system

Tag

10xHis tag at the N-terminus

Protein Format

Soluble

Form

Liquid or Lyophilized powder

Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

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

KCNQ4; 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; Potassium voltage-gated channel subfamily Q member 4

Gene ID

[9132](#)

UniProt ID

[P56696](#)