

Product Information

MemDX™ Membrane Protein Human KCNQ2 (Potassium voltage-gated channel subfamily Q member 2) for Antibody Discovery

Cat. No.: **MP0597X**

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

This product is a 68.97 kDa Human KCNQ2 membrane protein expressed in *in vitro* wheat germ 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

KCNQ2

Protein Length

Full-length

Molecular Weight

68.97 kDa

TMD

6

Sequence

MVQKSRNGGVYPGPSGEKKLVGVGLDPGAPDSTRDGALLIAGSEAPKRGSIKPRAGGAGAGKPPKRNAFYRKLQNFLYNVL

Product Description

Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

Expression Systems

in vitro wheat germ expression system

Tag

GST-tag at N-terminal

Form

Liquid

Purification

Glutathione Sepharose 4 Fast Flow

Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer

Storage

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

Target**Target Protein**

KCNQ2

Full Name

Potassium voltage-gated channel subfamily Q member 2

Introduction

The M channel is a slowly activating and deactivating potassium channel that plays a critical role in the regulation of neuronal excitability. The M channel is formed by the association of the protein encoded by this gene and a related protein encoded by the KCNQ3 gene, both integral membrane proteins. M channel currents are inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. Defects in this gene are a cause of benign familial neonatal convulsions type 1 (BFNC), also known as epilepsy, benign neonatal type 1 (EBN1). At least five transcript variants encoding five different isoforms have been found for this gene.

Alternative Names

EBN; BFNC; EBN1; ENB1; HNSPC; KV7.2; KCNA11

Gene ID

[3785](#)

UniProt ID

[O43526](#)