Recombinant Human KCNQ4 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. KCNQ4-6619H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	KCNQ4 MS Standard C13 and N15-labeled recombinant protein (NP_751895) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	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.
Molecular Mass	71 kDa
AA Sequence	MAEAPPRRLGLGPPPGDAPRAELVALTAVQSEQGEAGGGGSPRRLGLLGSPLPPG APLPGPGSGSGSACGQRSSAAHKRYRRLQNWVYNVLERPRGWAFVYHVFIFLLVF SCLVLSVLSTIQEHQELANECLLILEFVMIVVFGLEYIVRVWSAGCCCRYRGWQGRF RFARKPFCVIDFIVFVASVAVIAAGTQGNIFATSALRSMRFLQILRMVRMDRRGGTWK

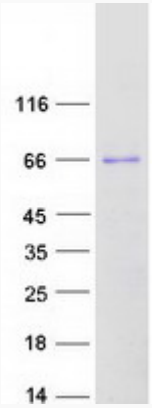
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	LLGSVVYAHSKELITAWYIGFLVLIFASFLVYLAEKDANSDFSSYADSLWWGTITLTTI GYGDKTPHTWLGRVLAAGFALLGISFFALPAGILGSGFALKVQEQHRQKHFEKRRM PAANLIQAAWRLYSTDMSRAYLTATWYYYDSILPSFSSRMGIKDRIRMGSSQRRTGP SKQHLAPPTMPTSPSSEQVGEATSPTKVQKSWSFNDRTRFRASLRLKPRTSAEDAP SEEVAEEKSYQCELTVDDIMPAVKTVIRSIRILKFLVAKRKFKETLRPYDVKDVIEQYS AGHLDMLGRIKSLQTRVDQIVGRGPGDRKAREKGDKGPSDAEVVDEISMMGRVVK VEKQVQSIEHKLDLLLGFYSRCLRSGTSASLGAVQVPLFDPDITSDYHSPVDHEDISV SAQTLSISRSVSTNMDTRRLEQKLISEEDLAANDILDYKDDDDKV	
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 3 months from receipt of products under proper storage and handling conditions.
Storage	Store at -80 centigrade. Avoid repeated freeze-thaw cycles.
Concentration	50 μg/mL as determined by BCA
Storage Buffer	100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name	KCNQ4 potassium voltage-gated channel subfamily Q member 4 [Homo sapiens (human)]
Official Symbol	KCNQ4
Synonyms	KCNQ4; potassium voltage-gated channel, KQT-like subfamily, member 4; DFNA2; potassium voltage-gated channel subfamily KQT member 4; Kv7.4; potassium channel KQT-like 4; potassium channel subunit alpha KvLQT4; KV7.4; DFNA2A;

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Gene ID	9132
mRNA Refseq	NM_172163
Protein Refseq	NP_751895
MIM	603537
UniProt ID	P56696
SDS-PAGE	

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