

# Recombinant Full Length Human KCNA1 Protein, GST-tagged

**Cat. No.** KCNA1-6859HF    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <b>Product Overview</b> | Human KCNA1 full-length ORF ( NP_000208.2, 1 a.a. - 495 a.a.) recombinant protein with GST-tag at N-terminal was expressed in wheat germ.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Source</b>           | In Vitro Cell Free System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>ProteinLength</b>    | 495 amino acids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Description</b>      | This gene encodes a voltage-gated delayed potassium channel that is phylogenetically related to the Drosophila Shaker channel. The encoded protein has six putative transmembrane segments (S1-S6), and the loop between S5 and S6 forms the pore and contains the conserved selectivity filter motif (GYGD). The functional channel is a homotetramer. The N-terminus of the channel is associated with beta subunits that can modify the inactivation properties of the channel as well as affect expression levels. The C-terminus of the channel is complexed to a PDZ domain protein that is responsible for channel targeting. Mutations in this gene have been associated with myokymia with periodic ataxia (AEMK). |
| <b>Molecular Mass</b>   | 82.9 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>AA Sequence</b>      | MTVMSEGENVDEASAAPGHPQDGSYPRQADHDDHECCERVVINISGLRFETQLKTLA<br>QFPNTLLGNPKKRMRYFDPLRNEYFFDRNRPSFDAILYYYQSGGRLRRPVNVPLDM<br>FSEEEKFYELGEEAMEKFREDEGFIKEEERPLPEKEYQRQVWLLFEYPESSGPARVI<br>AIVSVMVILISIVIFCLETLPCLKDDKDFTGTVHRIDNTTVIYNSNIFTDPFFIVETLCIIWF                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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SFELVVRFFACPSKTDFFKNIMNFIDIVAIIPYFITLGTEIAEQEGNQKGEQATSLAILRV  
IRLVRVFRIFKLSRHSKGLQILGQTLKASMRGLLIFFLFIGVILFSSAVYFAEAEAEAES  
HFSSIPDAFWWAVVSMTTVGYGDMYPVTIGGKIVGSLCAIAGVLTIALPVPVIVSNFN  
YFYHRETEGEEQAQLLHVSSPNLASDSDLRRSSSTMSKSEYMEIEEDMNNSIAHY  
RQVNIRTANCTTANQNCVNKSKLLTDV

**Applications**

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

**Storage** Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

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

## GENE INFORMATION

**Gene Name** KCNA1 potassium voltage-gated channel subfamily A member 1 [ Homo sapiens (human) ]

**Official Symbol** KCNA1

**Synonyms** KCNA1; potassium voltage-gated channel subfamily A member 1; EA1; MK1; AEMK; HBK1; HUK1; MBK1; RBK1; KV1.1; potassium voltage-gated channel subfamily A member 1; potassium channel, voltage gated shaker related subfamily A, member 1; potassium voltage-gated channel, shaker-related subfamily, member 1 (episodic ataxia with myokymia); voltage-gated K(+) channel HuK1; voltage-gated potassium channel HBK1; voltage-gated potassium channel subunit Kv1.1

**Gene ID** 3736

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|----------------|-----------|
| mRNA Refseq    | NM_000217 |
| Protein Refseq | NP_000208 |
| MIM            | 176260    |
| UniProt ID     | Q09470    |

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