Datasheet for ABIN7563914

Kv1.4 Protein (AA 1-654) (His tag)

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Overview

Quantity:	1 mg
Target:	Kv1.4 (KCNA4)
Protein Characteristics:	AA 1-654
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Kv1.4 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Kcna4 Protein expressed in mammalian cells.
Sequence:	MEVAMVSAES SGCNSHMPYG YAAQARARER ERLAHSRAAA AAAVAAATAA VEGTGGSGGG PHHHHQTRGA YSSHDPQGSR GSRRRRRQRT EKKKLHHRQS SFPHCSDLMP SGSEEKILRE LSEEEEDEEE EEEEEEEGRF YYSEEDHGDG CSYTDLLPQD DGGGGGYSSV RYSDCCERVV INVSGLRFET QMKTLAQFPE TLLGDPEKRT QYFDPLRNEY FFDRNRPSFD AILYYYQSGG RLKRPVNVPF DIFTEEVKFY QLGEEALLKF REDEGFVREE EDRALPENEF KKQIWLLFEY PESSSPARGI AIVSVLVILI SIVIFCLETL PEFRDDRDLI MALSAGGHSR LLNDTSAPHL ENSGHTIFND PFFIVETVCI VWFSFEFVVR CFACPSQALF FKNIMNIIDI VSILPYFITL GTDLAQQQGG GNGQQQQAMS FAILRIIRLV RVFRIFKLSR HSKGLQILGH TLRASMRELG LLIFFLFIGV ILFSSAVYFA EADEPTTHFQ SIPDAFWWAV VTMTTVGYGD MKPITVGGKI VGSLCAIAGV LTIALPVPVI VSNFNYFYHR ETENEEQTQL TQNAVSCPYL PSNLLKKFRS STSSSLGDKS EYLEMEEGVK ESLCGKEEKC QGKGDESETD KNNCSNAKAV ETDV **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression**

Product Details

	system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	Kv1.4 (KCNA4)
Alternative Name:	Kcna4 (KCNA4 Products)
Background:	Potassium voltage-gated channel subfamily A member 4 (Voltage-gated potassium channel subunit Kv1.4),FUNCTION: Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes. Forms tetrameric potassium-selective channels through which potassium ions pass in accordance with their electrochemical gradient. The channel alternates between opened and closed conformations in response to the voltage difference across the membrane (PubMed:8020965). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNA1, KCNA2, KCNA4, KCNA5, and possibly other family members as well, channel properties depend on the type of alpha subunits that are part of the channel (By similarity). Channel properties are

Target Details

	modulated by cytoplasmic beta subunits that regulate the subcellular location of the alpha subunits and promote rapid inactivation. In vivo, membranes probably contain a mixture of heteromeric potassium channel complexes, making it difficult to assign currents observed in intact tissues to any particular potassium channel family member. Homotetrameric KCNA4 forms a potassium channel that opens in response to membrane depolarization, followed by rapid spontaneous channel closure (PubMed:8020965). Likewise, a heterotetrameric channel formed by KCNA1 and KCNA4 shows rapid inactivation (By similarity). {ECO:0000250|UniProtKB:P15385, ECO:0000269|PubMed:8020965}.
Molecular Weight:	73.5 kDa
UniProt:	Q61423

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

