Datasheet for ABIN7554233

Kv1.4 Protein (AA 1-653) (His tag)

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Overview

Quantity:	1 mg
Target:	Kv1.4 (KCNA4)
Protein Characteristics:	AA 1-653
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Kv1.4 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat KCNA4 Protein expressed in mammalien cells.
Sequence:	MEVAMVSAES SGCNSHMPYG YAAQARARER ERLAHSRAAA AAAVAAATAA VEGSGGSGGG SHHHHQSRGA CTSHDPQSSR GSRRRRRQRS EKKKAHYRQS SFPHCSDLMP SGSEEKILRE LSEEEEDEEE EEEEEEEGRF YYSEDDHGDE CSYTDLLPQD EGGGGYSSVR YSDCCERVVI NVSGLRFETQ MKTLAQFPET LLGDPEKRTQ YFDPLRNEYF FDRNRPSFDA ILYYYQSGGR LKRPVNVPFD IFTEEVKFYQ LGEEALLKFR EDEGFVREEE DRALPENEFK KQIWLLFEYP ESSSPARGIA IVSVLVILIS IVIFCLETLP EFRDDRDLVM ALSAGGHGGL LNDTSAPHLE NSGHTIFNDP FFIVETVCIV WFSFEFVVRC FACPSQALFF KNIMNIIDIV SILPYFITLG TDLAQQQGGG NGQQQQAMSF AILRIIRLVR VFRIFKLSRH SKGLQILGHT LRASMRELGL LIFFLFIGVI LFSSAVYFAE ADEPTTHFQS IPDAFWWAVV TMTTVGYGDM KPITVGGKIV GSLCAIAGVL TIALPVPVIV SNFNYFYHRE TENEEQTQLT QNAVSCPYLP SNLLKKFRSS TSSSLGDKSE YLEMEEGVKE SLCAKEEKCQ GKGDDSETDK NNCSNAKAVE TDV **Sequence**

Product Details

	without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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, Western Blot
Grade:	custom-made

Target Details

Target:	Kv1.4 (KCNA4)
Alternative Name:	KCNA4 (KCNA4 Products)
Background:	Potassium voltage-gated channel subfamily A member 4 (HPCN2) (Voltage-gated K(+) channel HuKII) (Voltage-gated potassium channel HBK4) (Voltage-gated potassium channel HK1) (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:19912772, PubMed:8495559). 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

Target Details

	part of the channel (PubMed:8495559). Channel properties are 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:19912772, PubMed:8495559). Likewise, a heterotetrameric channel formed by KCNA1 and KCNA4 shows rapid inactivation (PubMed:17156368). {ECO:0000269|PubMed:17156368, ECO:0000269|PubMed:19912772, ECO:0000269|PubMed:27582084, ECO:0000269|PubMed:8495559}.
Molecular Weight:	73.3 kDa
UniProt:	P22459

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. 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