

Datasheet for ABIN7554245

Kv2.2 Protein (AA 1-911) (His tag)



Overview

Quantity:	1 mg
Target:	Kv2.2 (KCNB2)
Protein Characteristics:	AA 1-911
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Kv2.2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant KCNB2 Protein expressed in mammalian cells.
Sequence:	MAEKAPPGLN RKTSRSTLSL PPEPVDIIRS KTCSRRVKIN VGGLNHEVLW RTLDRLPRTR
	LGKLRDCNTH ESLLEVCDDY NLNENEYFFD RHPGAFTSIL NFYRTGKLHM MEEMCALSFG
	QELDYWGIDE IYLESCCQAR YHQKKEQMNE ELRREAETMR EREGEEFDNT CCPDKRKKLW
	DLLEKPNSSV AAKILAIVSI LFIVLSTIAL SLNTLPELQE TDEFGQLNDN RQLAHVEAVC
	IAWFTMEYLL RFLSSPNKWK FFKGPLNVID LLAILPYYVT IFLTESNKSV LQFQNVRRVV
	QIFRIMRILR ILKLARHSTG LQSLGFTLRR SYNELGLLIL FLAMGIMIFS SLVFFAEKDE DATKFTSIPA
	SFWWATITMT TVGYGDIYPK TLLGKIVGGL CCIAGVLVIA LPIPIIVNNF SEFYKEQKRQ
	EKAIKRREAL ERAKRNGSIV SMNLKDAFAR SMELIDVAVE KAGESANTKD SADDNHLSPS
	RWKWARKALS ETSSNKSFEN KYQEVSQKDS HEQLNNTSSS SPQHLSAQKL EMLYNEITKT
	QPHSHPNPDC QEKPERPSAY EEEIEMEEVV CPQEQLAVAQ TEVIVDMKST SSIDSFTSCA
	TDFTETERSP LPPPSASHLQ MKFPTDLPGT EEHQRARGPP FLTLSREKGP AARDGTLEYA
	PVDITVNLDA SGSQCGLHSP LQSDNATDSP KSSLKGSNPL KSRSLKVNFK ENRGSAPQTP

PSTARPLPVT TADFSLTTPQ HISTILLEET PSQGDRPLLG TEVSAPCQGP SKGLSPRFPK QKLFPFSSRE RRSFTEIDTG DDEDFLELPG AREEKQVDSS PNCFADKPSD GRDPLREEGS VGSSSPQDTG HNCRQDIYHA VSEVKKDSSQ EGCKMENHLF APEIHSNPGD TGYCPTRETS M Sequence 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. If you are looking for a specific domain and are interested in a partial protein or a different Specificity: 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 Kv2.2 (KCNB2) Target: Alternative Name: KCNB2 (KCNB2 Products) Background: Potassium voltage-gated channel subfamily B member 2 (Voltage-gated potassium channel subunit Kv2.2),FUNCTION: Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes, primarily in the brain and smooth muscle cells. Channels open or close in response to the voltage difference across the membrane, letting potassium ions pass in accordance with their electrochemical gradient. Homotetrameric

channels mediate a delayed-rectifier voltage-dependent outward potassium current that display rapid activation and slow inactivation in response to membrane depolarization. Can form functional homotetrameric and heterotetrameric channels that contain variable proportions of KCNB1, channel properties depend on the type of alpha subunits that are part of the channel. Can also form functional heterotetrameric channels with other alpha subunits that are non-conducting when expressed alone, such as KCNS1 and KCNS2, creating a functionally diverse range of channel complexes. 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. Contributes to the delayed-rectifier voltage-gated potassium current in cortical pyramidal neurons and smooth muscle cells. {ECO:0000250|UniProtKB:A6H8H5, ECO:0000250|UniProtKB:Q63099}.

Molecular Weight:

102.6 kDa

UniProt:

Q92953

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