

Datasheet for ABIN7554339

KCNAB1 Protein (AA 1-419) (His tag)



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Overview

Quantity:	1 mg
Target:	KCNAB1
Protein Characteristics:	AA 1-419
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNAB1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant KCNAB1 Protein expressed in mammalian cells.
Sequence:	<p>MLAARTGAAG SQISEENTKL RRQSGFSVAG KDKSPKKASE NAKDSSLSPS GESQLRARQL ALLREVEMNW YLKLCDLSSE HTTPCTTGMP HRNLGKSGLR VSCLGLGTWV TFGGQISDEV AERLMTIAYE SGVNLFDTA E VYAAGKAEVI LGSIIKKKGW RRSSLVITTK LYWGGKAETE RGLSRKHIE GLKGS LQRLQ LEYVDVVFAN RPDSNTPMEE IVRAMTHVIN QGMAMYWGTS RWSAMEIMEA YSVARQFNMI PPVCEQAEYH LFQREKVEVQ LPELYHKIGV GAMTWSPLAC GIISGKYGNG VPESSRASLK CYQWLKERIV SEEGRKQQNK LKDLSPIAER LGCTLPQLAV AWCLRNEGVS SVLLGSSTPE QLIENLGAIQ VLPKMTSHVV NEIDNILRNK PYSKKDYRS</p> <p>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.</p>
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.

Product Details

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: KCNAB1

Alternative Name: KCNAB1 ([KCNAB1 Products](#))

Background: Voltage-gated potassium channel subunit beta-1 (EC 1.1.1.-) (K(+)) channel subunit beta-1 (Kv-beta-1),FUNCTION: Cytoplasmic potassium channel subunit that modulates the characteristics of the channel-forming alpha-subunits (PubMed:7499366, PubMed:7603988, PubMed:17156368, PubMed:17540341, PubMed:19713757). Modulates action potentials via its effect on the pore-forming alpha subunits (By similarity). Promotes expression of the pore-forming alpha subunits at the cell membrane, and thereby increases channel activity (By similarity). Mediates closure of delayed rectifier potassium channels by physically obstructing the pore via its N-terminal domain and increases the speed of channel closure for other family members (PubMed:9763623). Promotes the closure of KCNA1, KCNA2 and KCNA5 channels (PubMed:7499366, PubMed:7890032, PubMed:7603988, PubMed:7649300, PubMed:8938711, PubMed:12077175, PubMed:12130714, PubMed:15361858, PubMed:17540341, PubMed:19713757). Accelerates KCNA4 channel closure (PubMed:7890032, PubMed:7649300, PubMed:7890764, PubMed:9763623). Accelerates the closure of heteromeric channels formed

Target Details

by KCNA1 and KCNA4 (PubMed:17156368). Accelerates the closure of heteromeric channels formed by KCNA2, KCNA5 and KCNA6 (By similarity). Isoform KvB1.2 has no effect on KCNA1, KCNA2 or KCNB1 (PubMed:7890032, PubMed:7890764). Enhances KCNB1 and KCNB2 channel activity (By similarity). Binds NADPH, this is required for efficient down-regulation of potassium channel activity (PubMed:17540341). Has NADPH-dependent aldoketoreductase activity (By similarity). Oxidation of the bound NADPH strongly decreases N-type inactivation of potassium channel activity (By similarity). {ECO:0000250|UniProtKB:P63143, ECO:0000250|UniProtKB:P63144, ECO:0000269|PubMed:12077175, ECO:0000269|PubMed:12130714, ECO:0000269|PubMed:15361858, ECO:0000269|PubMed:17156368, ECO:0000269|PubMed:17540341, ECO:0000269|PubMed:19713757, ECO:0000269|PubMed:7499366, ECO:0000269|PubMed:7603988, ECO:0000269|PubMed:7649300, ECO:0000269|PubMed:7890032, ECO:0000269|PubMed:7890764, ECO:0000269|PubMed:8938711, ECO:0000269|PubMed:9763623, ECO:0000305}.

Molecular Weight: 46.6 kDa

UniProt: [Q14722](#)

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