

Datasheet for ABIN7554343
KCNQ5 Protein (AA 1-932) (His tag)



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Overview

Quantity:	1 mg
Target:	KCNQ5
Protein Characteristics:	AA 1-932
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNQ5 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant KCNQ5 Protein expressed in mammalian cells.
Sequence:	<p>MPRHHAGGEE GGAAGLWVKS GAAAAAAGGG RLGSGMKDVE SGRGRVLLNS AAARGDGLLL LGTRAATLGG GGGGLRESRR GKQGARMSLL GKPLSYTSSQ SCRRNVKYRR VQNYLYNVLE RPRGWAFIYH AFVFLVFGC LILSVFSTIP EHTKLASSCL LILEFVMIVV FGLEFIIRIW SAGCCCRYRG WQGRRLFARK PFCVIDTIVL IASIAVVS AK TQGNIFATSA LRSLRFLQIL RMVRMDRRGG TWKLLGSVVY AHSKELITAW YIGFLVLIFS SFLVYLVEKD ANKEFSTYAD ALWWGTITLT TIGYGDKTPL TWLGRLLSAG FALLGISFFA LPAGILGSGF ALKVQEQHRQ KHFEKRRNPA ANLIQCVWRS YAADEKSVSI ATWKPHLKAL HTCSPKKEQ GEASSSQKLS FKERVRMASP RGQSIKSRQA SVGDRRSPST DITAEGSPTK VQKSWSFNDR TRFRPSLRLK SSQPKPVIDA DTALGTDDVY DEKGCQCDVS VEDLTPPLKT VIRAIRIMKF HVAKRKFKET LRPYDVKDVI EQYSAGHLDL LCRIKSLQTR VDQILGKGQI TSDKKSREKI TAEHETDDL SMLGRVVKVE KQVQSIESKL DCLLDIYQQV LRKGSASALA LASFQIPPF CEQTSYQSP VDSKDLGSA QNSGCLSRST SANISRGLQF ILTPNEFSAQ TFYALSPTMH SQATQVPISQ</p>

Product Details

SDGSAVAATN TIANQINTAP KPAAPTTLQI PPPLPAIKHL PRPETLHPNP AGLQESISDV
TTCLVASKEN VQVAQSNLTK DRSMRKSFDG GGETLLSVCP MVPKDLGKSL SVQNLIRSTE
ELNIQLSGSE SSGSRGSQDF YPKWRESKLF ITDEEVGPEE TETDTFDAAP QPAREAAFAS
DSLRTGRSRS SQSICKAGES TDALSLPHVK LK **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.**

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: KCNQ5

Alternative Name: KCNQ5 ([KCNQ5 Products](#))

Background: Potassium voltage-gated channel subfamily KQT member 5 (KQT-like 5) (Potassium channel subunit alpha KvLQT5) (Voltage-gated potassium channel subunit Kv7.5),FUNCTION:
Associates with KCNQ3 to form a potassium channel which contributes to M-type current, a slowly activating and deactivating potassium conductance which plays a critical role in

Target Details

determining the subthreshold electrical excitability of neurons. Therefore, it is important in the regulation of neuronal excitability. May contribute, with other potassium channels, to the molecular diversity of a heterogeneous population of M-channels, varying in kinetic and pharmacological properties, which underlie this physiologically important current. Insensitive to tetraethylammonium, but inhibited by barium, linopirdine and XE991. Activated by niflumic acid and the anticonvulsant retigabine. As the native M-channel, the potassium channel composed of KCNQ3 and KCNQ5 is also suppressed by activation of the muscarinic acetylcholine receptor CHRM1. {ECO:0000269|PubMed:10787416, ECO:0000269|PubMed:11159685, ECO:0000269|PubMed:28669405}.

Molecular Weight: 102.2 kDa

UniProt: [Q9NR82](#)

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