Datasheet for ABIN7554267

KCNQ3 Protein (AA 1-872) (His tag)

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Overview

Quantity:	1 mg
Target:	KCNQ3
Protein Characteristics:	AA 1-872
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNQ3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant KCNQ3 Protein expressed in mammalian cells.
Sequence:	MGLKARRAAG AAGGGGDGGG GGGGAANPAG GDAAAAGDEE RKVGLAPGDV EQVTLALGAG ADKDGTLLLE GGGRDEGQRR TPQGIGLLAK TPLSRPVKRN NAKYRRIQTL IYDALERPRG WALLYHALVF LIVLGCLILA VLTTFKEYET VSGDWLLLLE TFAIFIFGAE FALRIWAAGC CCRYKGWRGR LKFARKPLCM LDIFVLIASV PVVAVGNQGN VLATSLRSLR FLQILRMLRM DRRGGTWKLL GSAICAHSKE LITAWYIGFL TLILSSFLVY LVEKDVPEVD AQGEEMKEEF ETYADALWWG LITLATIGYG DKTPKTWEGR LIAATFSLIG VSFFALPAGI LGSGLALKVQ EQHRQKHFEK RRKPAAELIQ AAWRYYATNP NRIDLVATWR FYESVVSFPF FRKEQLEAAS SQKLGLLDRV RLSNPRGSNT KGKLFTPLNV DAIEESPSKE PKPVGLNNKE RFRTAFRMKA YAFWQSSEDA GTGDPMAEDR GYGNDFPIED MIPTLKAAIR AVRILQFRLY KKKFKETLRP YDVKDVIEQY SAGHLDMLSR IKYLQTRIDM IFTPGPPSTP KHKKSQKGSA FTFPSQQSPR NEPYVARPST SEIEDQSMMG KFVKVERQVQ DMGKKLDFLV DMHMQHMERL QVQVTEYYPT KGTSSPAEAE KKEDNRYSDL KTIICNYSET GPPEPPYSFH QVTIDKVSPY GFFAHDPVNL

Product Details

	PRGGPSSGKV QATPPSSATT YVERPTVLPI LTLLDSRVSC HSQADLQGPY SDRISPRQRR SITRDSDTPL SLMSVNHEEL ERSPSGFSIS QDRDDYVFGP NGGSSWMREK RYLAEGETDT DTDPFTPSGS MPLSSTGDGI SDSVWTPSNK PI **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:	KCNQ3
Alternative Name:	KCNQ3 (KCNQ3 Products)
Background:	Potassium voltage-gated channel subfamily KQT member 3 (KQT-like 3) (Potassium channel subunit alpha KvLQT3) (Voltage-gated potassium channel subunit Kv7.3),FUNCTION: Associates with KCNQ2 or KCNQ5 to form a potassium channel with essentially identical properties to the channel underlying the native M-current, a slowly activating and deactivating potassium conductance which plays a critical role in determining the subthreshold electrical

Target Details

	excitability of neurons as well as the responsiveness to synaptic inputs. Therefore, it is important in the regulation of neuronal excitability. KCNQ2-KCNQ3 channel is selectively permeable to other cations besides potassium, in decreasing order of affinity K(+) > Rb(+) > Cs(+) > Na(+). Associates with Na(+)-coupled myo-inositol symporter SLC5A3 forming a coregulatory complex that alters ion selectivity, increasing Na(+) and Cs(+) permeation relative to K(+) permeation (PubMed:28793216). {ECO:0000269|PubMed:11159685, ECO:0000269|PubMed:14534157, ECO:0000269|PubMed:16319223, ECO:0000269|PubMed:28793216, ECO:0000269|PubMed:9872318}.
Molecular Weight:	96.7 kDa
UniProt:	O43525

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