

Datasheet for ABIN3137305

KCNQ5 Protein (AA 1-933) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	KCNQ5
Protein Characteristics:	AA 1-933
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNQ5 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MPRHHAGGEE GGAAGLWVRS GAAAAAGAGG GRPGSGMKDV ESGRGRVLLN SAAARGDGLL</p> <p>LLGTRAAALG GGGGGLRESR RGKQGARM SL LGKPLSYTSS QSCRRNVKYR RVQNYLYNVL</p> <p>ERPRGWAFVY HAFVLLVFG CLILSVFSTI PEHTKLASSC LLILEFVMIV VFGLEFIIRI</p> <p>WSAGCCCRYR GWQGRLRFAR KPFCVIDTIV LIASIAVVS A KTQGNIFATS ALRSLRFLQI</p> <p>LRMVRMDRRG GTWKLLGSVV YAHSKELITA WYIGFLVLIF SSFLVYLVEK DANKEFSTYA</p> <p>DALWWGTITL TTIGYGDKTP LTWLGRLLSA GFALLGISFF ALPAGILGSG FALKVQEQHR</p> <p>QKHFEKRRNP AANLIQCVWR SYAADEKSVS IATWKPHLKA LHTCSPTKKE QGEASSSQKL</p> <p>SFKERV MAS PRGQSIKSRQ ASVGDRRSPS TDITAEGSPT KVQKSWSFND RTRFRPSLRL</p> <p>KSSQPKPVID ADTALGIDDV YDEKGCQCDV SVEDLTPLK TVIRAIRIMK FHVAKRKFK E</p> <p>TLRPYDV KDV IEQYSAGHLD MLCRIKSLQT RVDQILGKGQ MTSDKKSREK ITAEHETDD</p> <p>PSMLARVVKV EKQVQSIESK LDCLLDIYQQ VLRKGSASAL TLASFQIPPF ECEQTS DYQS</p>

PVDSKDLSGS AQNSGCLTRS ASANISRLQ FILTPNEFSA QTFYALSPTM HSQATQVPMS
QNDGSSVVAT NNIANQISAA PKPAAPTTLQ IPPPLSAIKH LSRPELLSN PTGLQESISD
VTTCLVASKE SVQFAQSNLT KDRSLRKSFD MGGETLLSVR PMVPKDLGKS LSVQNLIRST
EELNLQFSGS ESSGSRGSQD FYPKWRESKL FITDEEVGAE ETETDTFDGT PPPAGEAAFS
SDSLRTGRSR SSQNICKTGD STDALSLPHV KLN

Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	KCNQ5
Alternative Name:	Kcnq5 (KCNQ5 Products)
Background:	<p>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 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. {ECO:0000269 PubMed:15963599}.</p>
Molecular Weight:	102.3 kDa
UniProt:	Q9JK45

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.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional</p>

Application Details

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Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months