Datasheet for ABIN3137211

SGK3 Protein (AA 1-496) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	SGK3
Protein Characteristics:	AA 1-496
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SGK3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MQRDCIMDYK ESCPSVSIPS SDEHREKKKR FTVYKVLVSV GRSEWFVFRR YAEFDKLYNS LKKQFPAMAL KIPAKRIFGD NFDPDFIKQR RAGLNEFIQN LVRYPELYNH PDVRAFLQMD SPRHQSDPSE DEDERSTSKP HSTSRNINLG PTGNPHAKPT DFDFLKVIGK GSFGKVLLAK RKLDGKFYAV KVLQKKIVLN RKEQKHIMAE RNVLLKNVKH PFLVGLHYSF QTTEKLYFVL DFVNGGELFF HLQRERSFPE PRARFYAAEI ASALGYLHSI KIVYRDLKPE NILLDSMGHV VLTDFGLCKE GIAISDTTTT FCGTPEYLAP EVIRKQPYDN TVDWWCLGAV LYEMLYGLPP FYCRDVAEMY DNILHKPLNL RPGVSLTAWS ILEELLEKNR QNRLGAKEDF LEIQNHPFFE SLSWTDLVQK KIPPPFNPNV AGPDDIRNFD AVFTEETVPY SVCVSSDYSI VNASVLEADD AFVGFSYAPP SEDLFL **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

Product Details

Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Sgk3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	SGK3
Alternative Name:	Sgk3 (SGK3 Products)
Background:	Serine/threonine-protein kinase which is involved in the regulation of a wide variety of ion channels, membrane transporters, cell growth, proliferation, survival and migration. Up-regulates Na(+) channels: SCNN1A/ENAC and SCN5A, K(+) channels: KCNA3/KV1.3, KCNE1, KCNQ1 and KCNH2/HERG, epithelial Ca(2+) channels: TRPV5 and TRPV6, chloride channel: BSND, creatine transporter: SLC6A8, Na(+)/dicarboxylate cotransporter: SLC13A2/NADC1, Na(+)-dependent phosphate cotransporter: SLC34A2/NAPI-2B, amino acid transporters: SLC1A5/ASCT2 and SLC6A19, glutamate transporters: SLC1A3/EAAT1, SLC1A6/EAAT4 and SLC1A7/EAAT5, glutamate receptors: GRIA1/GLUR1 and GRIK2/GLUR6, Na(+)/H(+) exchanger: SLC9A3/NHE3, and the Na(+)/K(+) ATPase. Plays a role in the regulation of renal tubular phosphate transport and bone density. Phosphorylates NEDD4L and GSK3B. Positively regulates ER transcription activity through phosphorylation of FLII. Negatively regulates the function of ITCH/AIP4 via its phosphorylation and thereby prevents CXCR4 from being efficiently sorted to lysosomes. {ECO:0000269|PubMed:15774535, ECO:0000269|PubMed:15774536, ECO:0000269|PubMed:21113728, ECO:0000269|PubMed:21451460, ECO:0000269|PubMed:21865597}.
Molecular Weight:	58.1 kDa Including tag.
UniProt:	Q9ERE3

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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

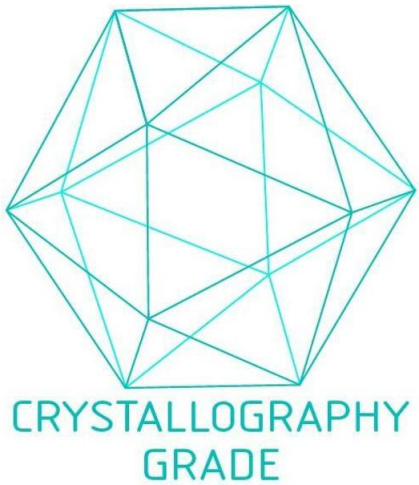

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process