Datasheet for ABIN7551917

PRKAG3 Protein (AA 1-489) (His tag)

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Overview

Quantity:	1 mg
Target:	PRKAG3
Protein Characteristics:	AA 1-489
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRKAG3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat PRKAG3 Protein expressed in mammalien cells.
Sequence:	MEPGLEHALR RTPSWSSLGG SEHQEMSFLE QENSSSWPSP AVTSSSERIR GKRRAKALRW TRQKSVEEGE PPGQGEGPRS RPAAESTGLE ATFPKTTPLA QADPAGVGTP PTGWDCLPSD CTASAAGSST DDVELATEFP ATEAWECELE GLLEERPALC LSPQAPFPKL GWDDELRKPG AQIYMRFMQE HTCYDAMATS SKLVIFDTML EIKKAFFALV ANGVRAAPLW DSKKQSFVGM LTITDFILVL HRYYRSPLVQ IYEIEQHKIE TWREIYLQGC FKPLVSISPN DSLFEAVYTL IKNRIHRLPV LDPVSGNVLH ILTHKRLLKF LHIFGSLLPR PSFLYRTIQD LGIGTFRDLA VVLETAPILT ALDIFVDRRV SALPVVNECG QVVGLYSRFD VIHLAAQQTY NHLDMSVGEA LRQRTLCLEG VLSCQPHESL GEVIDRIARE QVHRLVLVDE TQHLLGVVSL SDILQALVLS PAGIDALGA **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.**

Product Details

Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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, Western Blot
Grade:	custom-made

Target Details

Target:	PRKAG3
Alternative Name:	PRKAG3 (PRKAG3 Products)
Background:	5'-AMP-activated protein kinase subunit gamma-3 (AMPK gamma3) (AMPK subunit gamma-3),FUNCTION: AMP/ATP-binding subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism (PubMed:14722619, PubMed:24563466, PubMed:17878938). In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. AMPK also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton, probably by indirectly activating myosin. The AMPK gamma3 subunit is a non-catalytic subunit with a regulatory role in muscle energy metabolism (PubMed:17878938). It mediates binding to AMP, ADP and ATP, leading to AMPK activation or inhibition: AMP-binding results in allosteric activation of alpha catalytic subunit (PRKAA1 or PRKAA2) both by inducing phosphorylation and preventing

Target Details

	dephosphorylation of catalytic subunits. ADP also stimulates phosphorylation, without stimulating already phosphorylated catalytic subunit. ATP promotes dephosphorylation of catalytic subunit, rendering the AMPK enzyme inactive. {ECO:0000269|PubMed:14722619, ECO:0000269|PubMed:17878938, ECO:0000269|PubMed:24563466}.
Molecular Weight:	54.3 kDa
UniProt:	Q9UGI9
Pathways:	AMPK Signaling, Cellular Glucan Metabolic Process, Warburg Effect

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.
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

