Datasheet for ABIN3134719

RGS14 Protein (AA 1-547) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	RGS14
Protein Characteristics:	AA 1-547
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RGS14 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MPGKPKHLGV PNGRMVLAVS DGELTSTAGS QAQGEGRGSS LSIHSLPSGP SSPFSTEEQP VASWAQSFER LLQDPRGLAY FTEFLKKEFS AENVTFWKAC ERFQQIPASD TKQLAQEAHN IYHEFLSSQA LSPVNIDRQA WLSEEVLAQP RPDMFRAQQL QIFNLMKFDS YARFVKSPLY QECLLAEAEG RPLREPGSSH LGSPDTARKK PKLKPGKSLP LGVEELGQLP LAEGPCGRPL RKSFRREMTG GAMNSALRRE SQGSLNSSAS LDLGFLAFVS SKSESHRKSL GSGESESESR PGKYCCVYLP DGTASLALAR PGLTIRDMLA GICEKRGLSL PDIKVYLVGN EQKALVLDQD CTVLADQEVR LENRITFQLE LVGLERVVRI SAKPTKRLQE ALQPILAKHG LSLDQVVLHR PGEKQPMDLE NPVSSVASQT LVLDTPPDAK MSEARSISPC RSQGCLPRTQ TKDSHLPPSS SSLLVEDASS STGNRQTCDI EGLVELLNRV QSSGAHDQRG LLRKEDLVLP EFLQLPSQRP GSREAPP **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.
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:	RGS14
Alternative Name:	Rgs14 (RGS14 Products)
Background:	Regulator of G-protein signaling 14 (RGS14) (RAP1/RAP2-interacting protein) (RPIP1),FUNCTION: Regulates G protein-coupled receptor signaling cascades. Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound form. Besides, modulates signal transduction via G protein alpha subunits by functioning as a GDP-dissociation inhibitor (GDI). Has GDI activity on G(i) alpha subunits GNAI1 and GNAI3, but not on GNAI2 and G(o)-alpha subunit GNAO1. Has GAP activity on GNAI0, GNAI2 and GNAI3. May act as a scaffold integrating G protein and Ras/Raf MAPkinase signaling pathways. Inhibits platelet-derived growth factor (PDGF)-stimulated ERK1/ERK2 phosphorylation, a process depending on its interaction with HRAS and that is reversed by G(i) alpha subunit GNAI1. Acts as a positive modulator of microtubule polymerisation and spindle organization through a G(i)-alpha-dependent mechanism. Plays a role in cell division, required for completion of the first mitotic division of the embryo. Involved in visual memory processing capacity, when overexpressed in the V2 secondary visual cortex area. Involved in hippocampal-based learning and memory, acts as a suppressor of synaptic plasticity in CA2 neurons. Required for the nerve growth factor (NGF)-mediated neurite outgrowth. Involved in stress resistance. {ECO:0000269|PubMed:10926822, ECO:0000269|PubMed:15112653, ECO:0000269|PubMed:15525537, ECO:0000269|PubMed:15917656, ECO:0000269|PubMed:16246175, ECO:0000269|PubMed:20837545}.
Molecular Weight:	59.8 kDa
UniProt:	P97492
Pathways:	Myometrial Relaxation and Contraction, Regulation of G-Protein Coupled Receptor Protein Signaling, Platelet-derived growth Factor Receptor Signaling

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:	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

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