

Datasheet for ABIN3131775

RGS7 Protein (AA 1-469) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	RGS7
Protein Characteristics:	AA 1-469
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RGS7 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MAQGNNYGQT SNGVADESPN MLVYRKMEDV IARMQDEKNG IPIRTVKSFL SKIPSVFSGS DIVQWLIKNL TIEDPVEALH LGTLMAAHGY FFPISDHVLT LKDDGTFYRF QTPYFWPSNC WEPENTDYAV YLCKRTMQNK ARLELADYEA ESLARLQRAF ARKWEFIFMQ AEAQAKVDKK RDKIERKILD SQERAFWDVH RVPVGCNTT EVDIKKSSRM RNPHKTRKSV YGLQNDIRSH SPTHPTPET KPTEDELHQ QIKYWQIQLD RHRLKMSKVA DSLLSYTEQY VEYDPFLVPP DPSNPWLSDD TTFWELEASK EPSQQRVKRW GFGMDEALKD PVGREQFLKF LESEFSSSEN RFLWAVEDLK RRPPIREVPSR VQEIWQEFLA PGAPSAINLD SKSYDKTTQN VKEPGRYTTE DAQEHIYKLM KSDSYPRFIR SSAYQELLQA KRKGKTLTSK RLTSLVQSY</p> <p>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.</p>

Product Details

Characteristics:	<div>Key Benefits:</div> <ul style="list-style-type: none">• 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). <p>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.</p> <p>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.</p> <div>Expression System:</div> <ul style="list-style-type: none">• 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.• 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! <div>Concentration:</div> <ul style="list-style-type: none">• 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:	RGS7
Alternative Name:	Rgs7 (RGS7 Products)
Background:	<p>Regulator of G-protein signaling 7 (RGS7),FUNCTION: GTPase activator component of the RGS7-GNB5 complex that regulates G protein-coupled receptor signaling cascades (PubMed:25792749). The RGS7-GNB5 complex acts as an inhibitor signal transduction by promoting the GTPase activity of G protein alpha subunits, such as GNAO1, thereby driving them into their inactive GDP-bound form (By similarity). May play a role in synaptic vesicle exocytosis (By similarity). Glycine-dependent regulation of the RGS7-GNB5 complex by GPR158 affects mood and cognition via its ability to regulate neuronal excitability in L2/L3 pyramidal neurons of the prefrontal cortex (PubMed:31311860, PubMed:30546127). Modulates the activity of potassium channels that are activated by GNAO1 in response to muscarinic acetylcholine receptor M2/CHRM2 signaling (By similarity). {ECO:0000250 UniProtKB:P49802, ECO:0000269 PubMed:25792749, ECO:0000269 PubMed:30546127, ECO:0000269 PubMed:31311860}.</p>
Molecular Weight:	54.8 kDa
UniProt:	O54829
Pathways:	Myometrial Relaxation and Contraction , Regulation of G-Protein Coupled Receptor Protein Signaling

Application Details

Application Notes:	<p>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.</p>
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 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!</p>

Application Details

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