

Datasheet for ABIN3086924
RAB3A Protein (AA 1-220) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	RAB3A
Protein Characteristics:	AA 1-220
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAB3A protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	<p>MASATDSRYG QKESDQNFY YMFKILIIGN SSVGKTSFLF RYADDSFTPA FVSTVGIDFK VKTIYRNDKR IKLQIWDTAG QERYRTITTA YYRGAMGFIL MYDITNEESF NAVQDWSTQI KTYSWDNAQV LLVGNKCDME DERVVSSERG RQLADHLGFE FFEASAKDNI NVKQTFERLV DVICEKMSES LDTADPAVTG AKQGPQLSDQ QVPPHQDCAC</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>
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Characteristics:	<p>Key Benefits:</p> <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).
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- 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: > 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Target Details

Target: RAB3A

Alternative Name: RAB3A ([RAB3A Products](#))

Background: Ras-related protein Rab-3A,FUNCTION: Small GTP-binding protein that plays a central role in regulated exocytosis and secretion. Controls the recruitment, tethering and docking of secretory vesicles to the plasma membrane (By similarity). Upon stimulation, switches to its

Target Details

active GTP-bound form, cycles to vesicles and recruits effectors such as RIMS1, RIMS2, Rabphilin-3A/RPH3A, RPH3AL or SYTL4 to help the docking of vesicles onto the plasma membrane (By similarity). Upon GTP hydrolysis by GTPase-activating protein, dissociates from the vesicle membrane allowing the exocytosis to proceed (By similarity). Stimulates insulin secretion through interaction with RIMS2 or RPH3AL effectors in pancreatic beta cells (By similarity). Regulates calcium-dependent lysosome exocytosis and plasma membrane repair (PMR) via the interaction with 2 effectors, SYTL4 and myosin-9/MYH9 (PubMed:27325790). Acts as a positive regulator of acrosome content secretion in sperm cells by interacting with RIMS1 (PubMed:22248876, PubMed:30599141). Also plays a role in the regulation of dopamine release by interacting with synaptotagmin I/SYT (By similarity). Interacts with MADD (via uDENN domain), the GTP-bound form is preferred for interaction (By similarity). {ECO:0000250|UniProtKB:P63011, ECO:0000250|UniProtKB:P63012, ECO:0000269|PubMed:22248876, ECO:0000269|PubMed:27325790, ECO:0000269|PubMed:30599141}.

Molecular Weight: 25.0 kDa

UniProt: [P20336](#)

Pathways: [Synaptic Membrane](#), [Synaptic Vesicle Exocytosis](#), [Dicarboxylic Acid Transport](#)

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.

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Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)