

## Datasheet for ABIN7551207 **RAB3A Protein (AA 1-220) (His tag)**



## Overview

Quantity:	1 mg
Target:	RAB3A
Protein Characteristics:	AA 1-220
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAB3A protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat RAB3A Protein expressed in mammalien cells.
Sequence:	MASATDSRYG QKESSDQNFD YMFKILIIGN SSVGKTSFLF RYADDSFTPA FVSTVGIDFK VKTIYRNDKR IKLQIWDTAG QERYRTITTA YYRGAMGFIL MYDITNEESF NAVQDWSTQI KTYSWDNAQV LLVGNKCDME DERVVSSERG RQLADHLGFE FFEASAKDNI NVKQTFERLV DVICEKMSES LDTADPAVTG AKQGPQLSDQ QVPPHQDCAC 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.
Characteristics:	<ul> <li>Key Benefits:</li> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalien cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and</li> </ul>

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**

Alternative Name:

Target: RAB3A

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 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 vesicules 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}.

## **Target Details**

Expiry Date:

12 months

9 - 1 - 1 - 1 - 1	
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.
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.