

Product datasheet for **AR39045PU-N**

RAB3A (1-220, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	RAB3A (1-220, His-tag) human recombinant protein, 50 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MASATDSRYG QKESSDQNFD YMFKILIIGN SSVGKTSFLF RYADDSFTPA FVSTVGIDFK VKTIYRNDKR IKLQIWDTAG QERYRTITTA YRGAMGFIL MYDITNEESF NAVQDWSTQI KTYSWDNAQV LLVGNKCDME DERVVSSERG RQLADHLGFE FFEASAKDNI NVKQTFERLV DVICEKMSSES LDTADPAVTG AKQGPQLSDQ QVPPHQDCAC
Tag:	His-tag
Predicted MW:	27.1 kDa
Concentration:	lot specific
Purity:	>90%
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl, 1 mM DTT
Preparation:	Liquid purified protein
Protein Description:	Recombinant human RAB3A protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_002857</u>
Locus ID:	5864
UniProt ID:	<u>P20336, A0A024R7I7</u>
Cytogenetics:	19p13.11



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Summary:

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 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). Plays also a role in the regulation of dopamine release by interacting with synaptotagmin I/SYT (By similarity).[UniProtKB/Swiss-Prot Function]

Protein Families:

Druggable Genome

Product images: