

Product datasheet for PH303973

RAB3A (NM_002866) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	RAB3A MS Standard C13 and N15-labeled recombinant protein (NP_002857)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC203973
Predicted MW:	25 kDa
Protein Sequence:	>RC203973 protein sequence Red=Cloning site Green=Tags(s) MASATDSRYGQKESDQNFDFYMKILIIIGNSSVGKTSFLFRYADDSFTPAFVSTVGIDFKVKTIYRNDKR IKLQIWDTAGQERYRTITTAYYRGAMGFILMYDITNEESFNAVQDWSTQIKTYSWDNAQVLLVGNKCDME DERVVSSEGRQLADHLGFEFFFEASAKDNINVKQTFERLVDVICEKMSESLDTADPAVTGAKQGPQLSDQ QVPPHQDCAC TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_002857
RefSeq Size:	1528
RefSeq ORF:	660
Locus ID:	5864
UniProt ID:	P20336 , A0A024R717
Cytogenetics:	19p13.11



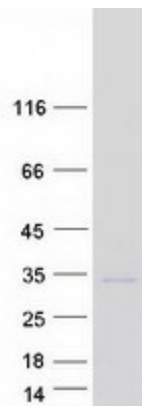
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Summary:

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:

Coomassie blue staining of purified RAB3A protein (Cat# [TP303973]). The protein was produced from HEK293T cells transfected with RAB3A cDNA clone (Cat# [RC203973]) using MegaTran 2.0 (Cat# [TT210002]).