

## Product datasheet for **TP502514**

### **Rab3a (NM\_009001) Mouse Recombinant Protein**

#### **Product data:**

|                                       |  |
|---------------------------------------|--|
| Product Type:                         | Recombinant Proteins   |
| Description:                          | Purified recombinant protein of Mouse RAB3A, member RAS oncogene family (Rab3a), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug   |
| Species:                              | Mouse  |
| Expression Host:                      | HEK293T  |
| Expression cDNA Clone or AA Sequence: | >MR202514 protein sequence<br><b>Red</b> =Cloning site <b>Green</b> =Tags(s)<br><br>MASATDSRYGQKESSDQNFDMFKILIIGNSSVGKTSFLFRYADDSFTPAFVSTVGIDFKVKTIYRNDKR<br>IKLQIWDTAGQERYRTITTAYYRGAMGFILMYDITNEESFNAVQDWSTQIKTYSWDNAQVLLVGNKCDME<br>DERVVSSERGRQLADHLGFEFFEASAKDNINVKQTFERLVDVICEKMSSESLDTADPAVTGAKQGPQLTDQ<br>QAPPHQDCAC<br><br><b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b> |
| Tag:                                  | C-MYC/DDK  |
| Predicted MW:                         | 25 kDa   |
| Concentration:                        | >0.05 µg/µL as determined by microplate BCA method   |
| Purity:                               | > 80% as determined by SDS-PAGE and Coomassie blue staining  |
| Buffer:                               | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol   |
| Note:                                 | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.   |
| Storage:                              | Store at -80°C after receiving vials.  |
| Stability:                            | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.  |
| RefSeq:                               | <u><a href="#">NP_033027</a></u>   |
| Locus ID:                             | 19339  |
| UniProt ID:                           | <u><a href="#">P63011</a></u>  |
| RefSeq Size:                          | 1485   |


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**Cytogenetics:** 8 34.15 cM

**RefSeq ORF:** 660

**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 (PubMed:11598194). 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 isoform RIMS2 and RPH3AL effectors in pancreatic beta cells (PubMed:15159548, PubMed:20674857). Regulates calcium-dependent lysosome exocytosis and plasma membrane repair (PMR) via the interaction with 2 effectors, SYTL4 and myosin-9/MYH9 (By similarity). Acts as a positive regulator of acrosome content secretion in sperm cells by interacting with RIMS1 (By similarity). Plays a role in the regulation of dopamine release by interacting with synaptotagmin I/SYT (By similarity).[UniProtKB/Swiss-Prot Function]