

# Product Description

**Product Name:** Rab3A Protein Q81L mutant

**Synonyms:** Member RAS oncogene family

**Catalogue Number:** 10129

**Source:** Human, recombinant full length, His<sub>6</sub>-tag

**Expression Host:** E. coli

**Molecular Weight:** 25 kDa

**Purity:** >99% by SDS-PAGE

**Introduction:** The Rab3 small G protein family consists of four members, Rab3A, -3B, -3C, and -3D. Rab3A is found specifically in brain and regulates a late step in synaptic vesicle fusion. Rab3A-mediated synaptic transmission is involved in circadian period and sleep homeostasis.

## Amino Acid Sequence (1-220, Q81L)

MASATDSRYGQKSSDQNFYDFKILIIIGNSSVVGKTSF  
LFRYADDSFTPAFVSTVGIIDFKVKTIYRNDKRIKLQIW  
DTAGLERYRTITTAAYRGAMGFILMYDITNEESFNAVQ  
DWSTQIKTYSWDNAQVLLVGNKCDMEDERVVSSERGRQ  
LADHLGFEEFEASAKDNINVKQTFERLVDVICEKMSSES  
LDTADPAVTGAKQGPQLSDQQVPPHQDCAC

## Properties

**Physical Appearance (form):** Dissolved in 20mM Tris-HCl, pH8.0, 150mM NaCl.

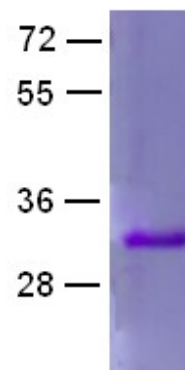
**Physical Appearance (form):** White or clear

**Concentration:** 1 mg/mL

**Storage:** -80°C

## Preparation Instructions

Adding of 10 mM  $\beta$ -mercaptoethanol or 1 mM DTT into the solution to protect the protein is recommended and using of non-ionic detergents such as n-Dodecyl  $\beta$ -D-maltoside (DoDM) or polyethylene detergents (e.g. C<sub>12</sub>E<sub>10</sub>) also help to stabilize the protein. Avoid repeated freezing and thawing.



The purity of His-tagged Rab3A Q81L was determined by SDS-PAGE and Coomassie Brilliant Blue Staining.

## References

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2. Giovedi, S. et al., J. Biol. Chem. 279: 43769-43779, 2004.
3. Huang, Y.-Y. et al., Proc. Nat. Acad. Sci. 102: 9365-9370, 2005.
4. Kapfhamer, D. et al., Nature Genet. 32: 290-295, 2002.
5. Rousseau-Merck, M. F. et al., Genomics 5: 694-698, 1989.
6. Rousseau-Merck, M. F. et al., Cytogenet. Cell Genet. 51: 1070-only, 1989.
7. Sullivan, M. et al., Cell. Signal. 11: 735-742, 1999.
8. Trask, B. et al., Genomics 15: 133-145, 1993.
9. Zahraoui, A. et al., J. Biol. Chem. 264: 12394-12401, 1989.

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