

## Rab5( $\Delta$ N15 Q79L) Mutant

**Catalog Number:** 10117

**Synonyms:** Member RAS oncogene family, RAB5A

**Background:** Rab5, consists of three isoforms, Rab5A, Rab5B, and Rab5C, is a small GTPase that is localized to early endosomes. It regulates the fusion between endocytic vesicles and early endosomes, as well as the homotypic fusion between early endosomes.

### Amino Acid Sequence (16-184, Q79L)

NKICQFKLVLLGESAVGKSSLVLRVFKGQFHEFQE  
STIGAAFLTQTVCLDDTTVKFEIWDTAGLERYHSL  
APMYRGAQAAIVVYDITNEESFARAKNWWKEL  
QRQASPNIVIALSGNKADLANKRAVDFQEAQSYA  
DDNSLLFMETSAKTSMNVNEIFMAIAKKLPKN

**Source:** Human, recombinant, His6-tag

**Expression Host:** E. coli

**Molecular Weight:** 17 kDa

**Purity:** > 98% by SDS-PAGE

**Constituents:** 20 mM Tris-HCl, pH 8.0, 150 mM NaCl.

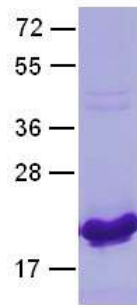
**Physical Appearance:** White or clear

**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 Rab5  $\Delta$ N15 Q79L was determined by SDS-PAGE and Coomassie Brilliant Blue Staining.

### References

1. Bucci, C. et al., Cell 70: 715-728, 1992.
2. Kinchen, J. M. et al., Nature 464: 778-782, 2010.
3. Kitano, M. et al., Nature 453: 241-245, 2008.
4. Lanzetti, L. et al., Nature 429: 309-314, 2004.
5. Lanzetti, L. et al., Nature 408: 374-377, 2000.
6. Miaczynska, M. et al., Cell 116: 445-456, 2004.
7. Ohya, T. et al., Nature 459: 1091-1097, 2009.
8. Otomo, A. et al., Hum. Molec. Genet. 12:1671-1687, 2003.
9. Rousseau-Merck, M. F. et al., Hum. Genet. 86: 350-354, 1991.
10. Stenmark, H. et al., Cell 83: 423-432, 1995.
11. Xiao, G.-H. et al., J. Biol. Chem. 272:6097-6100, 1997.
12. Zahraoui, A. et al., J. Biol. Chem. 264: 12394-12401, 1989.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC APPLICATIONS