

# Product Information

sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103 USA  
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757  
email: techservice@sial.com sigma-aldrich.com

## Anti-Rab 11

produced in rabbit, affinity isolated antibody

Catalog Number **R5903**

### Product Description

Anti-Rab 11 is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acid residues M(1)GTRDDEYDYLKVVVIC(17) of human Rab 11. This sequence is completely conserved in human, mouse, and rat, and 94% conserved in *C. elegans* and amphibians. The antibody is affinity-purified.

Anti-Rab 11 specifically detects Rab 11 from human and non-human primate samples. By immunoblotting, an ~22 kDa protein representing Rab 11 is detected using CV1, PC3, and HeLa cell extracts. Another less prominent, unknown band is also detected by this antibody at ~35 kDa.

Rab proteins are low molecular weight GTP-binding proteins that form the largest branch of the Ras superfamily of GTPases. The Rab GTPases mediate the directional transport of cargo between organelles along the secretory pathway, as vesicles from donor compartments fuse with the membrane of specific acceptor compartments.<sup>1,2</sup> Alterations in the Rab GTPases and associated proteins have been implicated in causing human diseases such as Griscelli syndrome, Charcot-Marie Tooth disease, tuberous sclerosis, and choroideremia. In addition the overexpression of Rab GTPases has been implicated in the disease pathogenesis with a number of cancers as well as vascular, lung, and thyroid diseases.<sup>3</sup>

To date more than 60 mammalian Rab proteins have been identified.<sup>4</sup> Rab11 in particular plays an essential role in protein recycling, and also has been implicated in regulating several other membrane transport pathways, including phagocytosis, polarized epithelial transport, and the delivery of the insulin-dependent glucose transporter to the plasma membrane.<sup>5</sup>

### Reagent

Supplied as a solution in phosphate buffered saline containing 1 mg/mL bovine serum albumin and 0.05% sodium azide as a preservative.

### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage/Stability

Store at -20 °C. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

### Product Profile

**Immunoblotting:** the recommended working concentration is ~6.6 µg/mL using CV1, PC3, and HeLa cell extracts.

**Note:** In order to obtain the best results and assay sensitivities of various techniques and preparations, we recommend determining optimal working dilutions by titration.

### References

1. Novick, P., and Zerial, M., *Curr. Opin. Cell Biol.*, **9**, 496-504 (1997).
2. Geppert, M., and Sudhof, T. C., *Annu. Rev. Neurosci.*, **21**, 75-95 (1998).
3. Stein, M.P., et al., *Adv. Drug Deliv. Rev.*, **55**, 1421-1437 (2003).
4. Pfeffer, S.R., *Trends Cell Biol.*, **11**, 487-491 (2001).
5. Peden, A.A., et al., *Mol. Biol. Cell*, **15**, 3530-3541 (2004).

KAA,PHC 01/08-1

Sigma brand products are sold through Sigma-Aldrich, Inc.  
Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications.  
Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply.  
Please see reverse side of the invoice or packing slip.

**SIGMA-ALDRICH™**