

## Anti-Phosphoinositide Monoclonal Antibodies

**A-21327 anti-phosphatidylinositol 4,5-diphosphate, mouse IgM monoclonal 2C11**

**A-21328 anti-phosphatidylinositol 3,4,5-triphosphate, mouse IgM monoclonal RC6F8**

### Quick Facts

#### Storage upon receipt:

- 4°C or -20°C in aliquots
- Avoid freeze-thaw cycles

solutions in phosphate-buffered saline (PBS), pH 7.2, containing 0.1% bovine serum albumin and 5 mM azide. Store the solutions in a refrigerator (4°C). The antibody stock solutions may be stored under these conditions for at least 30 days without adverse effects on their performance in typical applications. For long-term storage, divide the solutions into single-use aliquots and store frozen at -20°C. Frozen aliquots retain their activity, evaluated by immunofluorescent staining, for at least six months. **AVOID REPEATED FREEZING AND THAWING.**

### Introduction

Recent research has revealed direct actions of phosphatidylinositol 4,5-biphosphate (PtdIns(4,5)P<sub>2</sub>) and phosphatidylinositol 3,4,5-triphosphate (PtdIns(3,4,5)P<sub>3</sub>) on a diverse array of cellular functions including actin assembly and cytoskeletal dynamics,<sup>1,2</sup> vesicular protein trafficking,<sup>3</sup> protein kinase localization and activation,<sup>4</sup> cell proliferation<sup>5</sup> and apoptosis.<sup>6</sup> We are pleased to offer mouse monoclonal IgM antibodies to PtdIns(4,5)P<sub>2</sub> and PtdIns(3,4,5)P<sub>3</sub> for immunocytochemical localization of these important lipid metabolites.<sup>7</sup> Both antibodies have been shown to recognize their cognate phosphoinositides in murine and human cells with only slight cross-reactivity with other phosphoinositides or phospholipids.

### Contents and Storage

Anti-PtdIns(4,5)P<sub>2</sub>, mouse IgM monoclonal 2C11 (A-21327), anti-PtdIns(3,4,5)P<sub>3</sub> and mouse IgM monoclonal RC6F8 (A-21328) are supplied in units of 100 µL as 1 mg/mL

### Applications

#### Anti-PtdIns(4,5)P<sub>2</sub>, mouse IgM monoclonal 2C11 (A-21327)

Recommended working dilutions are 1:5000 for dot blots, 1:1000 for ELISA and 1:500 for cellular immunofluorescence and immunohistochemistry. Monoclonal 2C11 exhibits some cross-reactivity towards PtdIns(3,4,5)P<sub>3</sub> and phosphatidylinositol 4-phosphate.<sup>7</sup>

#### Anti-PtdIns(3,4,5)P<sub>3</sub>, mouse IgM monoclonal RC6F8 (A-21328)

Recommended working dilutions are 1:100 for cellular immunofluorescence and 1:500 for immunohistochemistry.

For secondary immunofluorescence detection, Molecular Probes offers an extensive range of goat anti-mouse IgM (µ chain) antibodies labeled with our outstanding Alexa Fluor dyes. For further information on these products, please visit our Web site ([www.probes.com](http://www.probes.com)) or contact our Technical Assistance Department.

### References

1. Chem Phys Lipids 98, 13 (1999); 2. Chem Phys Lipids 101, 93 (1999); 3. J Biol Chem 274, 9219 (1999); 4. Annu Rev Biochem 68, 965 (1999); 5. Proc Natl Acad Sci USA 96, 4240 (1999); 6. J Cell Biol 151, 483 (2000); 7. Biochem Soc Trans 27, 648 (1999).

### Product List

Cat #	Product Name	Unit Size
A-21327	anti-phosphatidylinositol 4,5-diphosphate, mouse IgM monoclonal 2C11 (anti-PtdIns(4,5)P <sub>2</sub> ) *1 mg/mL*	100 µL
A-21328	anti-phosphatidylinositol 3,4,5-triphosphate, mouse IgM monoclonal RC6F8 (anti-PtdIns(3,4,5)P <sub>3</sub> ) *1 mg/mL*	100 µL

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## Contact Information

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