



Product Information

ANTI-PHOSPHO-PHOSPHOLIPASE C γ -1 (pTyr⁷⁸³)

Developed in Rabbit, Affinity Isolated Antibody

Product Number **P 6111**

Product Description

Anti-phospho-Phospholipase C γ -1 (pTyr⁷⁸³) was developed in rabbit using as immunogen a synthetic phosphopeptide derived from the region of human PLC γ that contains tyrosine 783. The serum is affinity purified using epitope-specific affinity chromatography. The antibody is preabsorbed with:

- i) a non-phosphopeptide corresponding to the site of phosphorylation of PLC γ to remove antibody reactive with non-phosphorylated PLC γ enzymes, and with
- ii) a generic tyrosine phosphorylated peptide to remove antibody reactive with phosphotyrosine, irrespective of the sequence.

Anti-phospho-Phospholipase C γ -1 (pTyr⁷⁸³) recognizes the endogenous form of PLC γ protein (135 kDa) when phosphorylated on tyrosine 783 and does not cross-react with a site-directed mutant (Y783F). This phosphorylation site is conserved among many species including human, rat, bovine and frog. The antibody has been used in immunoblotting application.

Phosphorylation of PLC- γ at the major phosphorylation site (Tyr⁷⁸³) is essential in T-cell antigen receptor (TCR) mediated cell signaling and Ca²⁺ mobilization, PDGF receptor stimulation and NFAT activation.¹ PLC- γ also mediates cytoplasmic signaling in nerve growth cone guidance and signaling in tumor cell invasion.^{2,3,4}

Reagent

Anti-phospho-Phospholipase C γ -1 (pTyr⁷⁸³) is supplied as a solution in phosphate buffer, pH 7.4, with no preservatives added.

Storage/Stability

Store at -70 °C. For extended storage, upon initial thawing, freeze in working aliquots. Avoid repeated freezing and thawing to prevent denaturing of the antibody. Working dilution samples should be discarded if not used within 12 hours. The antibody is stable for at least 6 months when stored appropriately.

Product Profile

A recommended working concentration of 0.1 to 1.0 μ g/ml (i.e. 1,000 dilution) is determined by immunoblotting using extracts from NIH-3T3 cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Irvin, B.J., et al., *Mol., Cellular Biol.*, **20**, 9149-9161 (2000).
2. Williams, B.L., et al., *EMBO J.*, **18**, 1832-1844 (1999).
3. Kassis, J., et al., *Clin. Cancer Res.*, **5**, 2251-2260 (1999).
4. Ming, G., et al., *Neuron*, **23**, 139-148 (1999).

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