# Human/Mouse/Rat Phospho-PLC-γ1 (Y783) Antibody

Recombinant Monoclonal Rabbit IgG Clone # 1016D
Catalog Number: MAB74542

## DESCRIPTION

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|---|---|
| **Species Reactivity** | Human/Mouse/Rat |
| **Specificity** | Detects human, mouse, and rat PLC-γ1 when phosphorylated at Y783. |
| **Source** | Recombinant Monoclonal Rabbit IgG Clone # 1016D |
| **Purification** | Protein A or G purified from cell culture supernatant |
| **Immunogen** | Phosphopeptide containing the human/mouse/rat PLC-γ1 Y783 site.<br>Accession # P19174 |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS. |

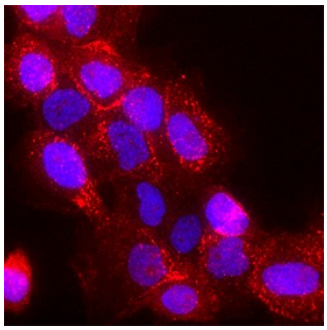
## APPLICATIONS

**Please Note:** *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

| | Recommended Concentration | Sample |
|---|---|---|
| **Immunocytochemistry** | 3-25 µg/mL | See Below |

## DATA

**Immunocytochemistry**



**Phospho-PLC-γ1 (Y783) in A431 Human Cell Line.** PLC-γ1 phosphorylated at Y783 was detected in immersion fixed A431 human epithelial carcinoma cell line treated with Recombinant Human EGF (Catalog # 236-EG) using Rabbit Anti-Human Phospho-PLC-γ1 (Y783) Polyclonal Antibody (Catalog # MAB74542) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and plasma membranes. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

## PREPARATION AND STORAGE

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| **Reconstitution** | Reconstitute at 0.5 mg/mL in sterile PBS |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| **Stability & Storage** | **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

Phospholipase C gamma-1 (PLC-γ1) is activated by receptor tyrosine kinases in response to growth factors and hormones, and phosphorylation at Tyr783 is a widely used indicator of activation. Activated PLC-γ1 catalyzes the hydrolysis of phosphatidylinositol 4,5-biphosphate to produce the second messengers inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG). IP3 mobilizes the release of calcium while DAG activates protein kinase C. PLC-γ1 plays an important role in regulating cell proliferation and differentiation.



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