

NEN[®] Phospholipid FlashPlate[®] PLUS

A Patented Platform for High Throughput, Homogeneous Lipid-Associated Enzyme Assays

The Phospholipid FlashPlate[®] PLUS from PerkinElmer Life Sciences uses a patented technology which enables the attachment of lipid substrates to the FlashPlate surface through a hydrophobic interaction. This allows for the quantitative and qualitative determination of the activity of various enzymes that act on membrane-bound substrates, without the need for organic extraction. This FlashPlate platform is suited for designing homogeneous assays for high throughput screening.

Proprietary Lipid Binding Technology Improves Assay Performance

Simple, fast, easy to use Homogeneous FlashPlate format eliminates steps

- No organic extraction
- No washes, aspirations, or separations needed
- No sample transfers

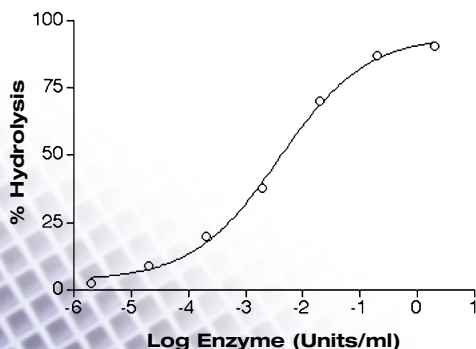
Versatile Works with many enzyme targets:
sphingosine kinase, sphingomyelinase, phospholipase C, and more.

Reproducible Highly precise microplate format for reliable results, time after time.
Typical CVs of <5%.

Suitable for Many Enzyme Targets in a Homogeneous Assay

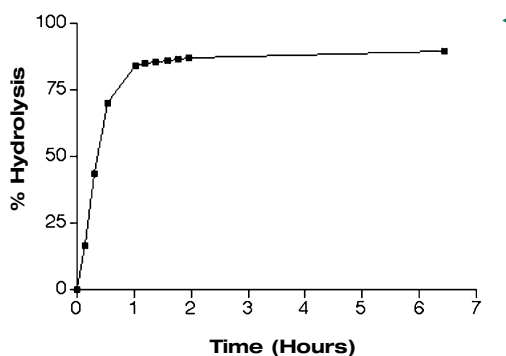
Simply coat the plate with your labeled enzyme substrate of choice, incubate, and aspirate. The plate effectively captures the specific substrate. This coated plate is then ready for the enzyme assay. Initiate the assay with the addition of the enzyme. The enzyme either cleaves the substrate or incorporates a label into the substrate, resulting in an increase or a decrease in the signal.

Sphingomyelinase Assay Utilizing [³H]Sphingomyelin Substrate



Hydrolysis of [³H]sphingomyelin, using increasing amounts of sphingomyelinase. The enzyme effectively hydrolyzed approximately 100% of the substrate.

Phospholipase C Assay Utilizing [³H]PIP₂ Substrate



Time course of [³H]PIP₂ hydrolysis. Plates coated with 0.2 ml/well of 0.5 μCi/ml [³H]PIP₂ substrate were incubated at room temperature with 50 pg/well of Recombinant PLC γ 1 enzyme for up to 6.5 hours. Hydrolysis of substrate is dependent on concentration of the enzyme.

Product Packaging, Shipping and Storage

SMP108	Phospholipid FlashPlate PLUS	5-plate kit	96-well
SMP108A	Phospholipid FlashPlate PLUS	20-plate kit	96-well

Includes Phospholipid-coated FlashPlates, plate covers, Technical Data Sheet.

Bulk sizes available upon request. Shipped at ambient temperature. Store at 2-8°C upon receipt.

PerkinElmer's optimized coating buffer for use with the Phospholipid FlashPlate (purchased separately).

SMP900	Phospholipid FlashPlate Coating Buffer, 10X Concentrate, 50 ml
SMP900A	Phospholipid FlashPlate Coating Buffer, 10X Concentrate, 200 ml

PerkinElmer's ligand for use in Phospholipase assays has high specific activity, 10-30 Ci/mmol (purchased separately).

NET1135 | Phosphatidylinositol-4,5-Bisphosphate, [Inositol-1-³H]

PerkinElmer also offers a comprehensive range of Radiolabeled Ligands, Radiolabeled Substrates, Cloned Receptors, and ³²P, ³³P, and ³⁵S Nucleotides.



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Phospholipid FlashPlate assay is covered by US Patent 5,972,595 and foreign equivalents and patents pending. FlashPlate is a registered trademark of Packard Instrument Company, exclusively licensed to NEN Life Science Products. FlashPlate is protected under US Patent 5,496,502 and foreign equivalents, to all of which NEN Life Science Products holds an exclusive worldwide license.

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