

Phospholipase Signaling Axis



Cayman Chemical offers a broad collection of research tools to study phospholipase signaling. This includes active phospholipase A₂ (PLA₂) enzymes as well as PLA₂ antibodies, PLA₂ assays kits, and the membrane phospholipid substrates upon which they act and small molecules that prevent this activity. Autotaxin inhibitors and a companion recombinant protein and inhibitor screening assay kit, as well as phospholipase D (PLD) inhibitors, are also available.

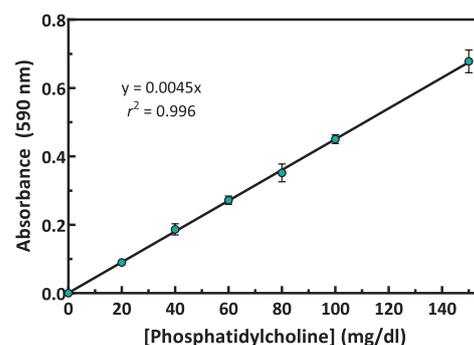
Additionally, we provide select lysophosphatidic acid (LPA) receptor polyclonal antibodies and LPA receptor modulators.

Circulating Phospholipid Quantification

Phosphatidylcholine Colorimetric Assay Kit

Item No. 10009926

- Measure PC in serum or plasma
- Assay 41 samples in duplicate
- **Assay Range:** 20-150 mg/dl
- Plate-based colorimetric measurement (580-600 nm)



PLA₂ Research Tools

Antibodies

Item No.	Product Name
10337	AdPLA ₂ Polyclonal Antibody
160507	iPLA ₂ (Type VI) Polyclonal Antibody
160500	sPLA ₂ (human Type IIA) Monoclonal Antibody (Clone SCACC353)
160510	sPLA ₂ (human Type V) Monoclonal Antibody (Clone MCL-3G1)
160502	sPLA ₂ (human Type IIA) Polyclonal Antiserum
160512	sPLA ₂ (mouse Type V) Polyclonal Antibody

Assay Kits

Item No.	Product Name
765021	cPLA ₂ Assay Kit
765001	sPLA ₂ Assay Kit
501380	sPLA ₂ (human Type IIA) ELISA Kit
10004883	sPLA ₂ (Type V) Inhibitor Screening Assay Kit

Active Enzymes

Item No.	Product Name
60500	sPLA ₂ (Type III)
10009563	sPLA ₂ (human recombinant Type V)

Substrates

Item No.	Product Name	Specificity
62910	7-hydroxycoumarinyl Arachidonate	+cPLA ₂
62240	Arachidonoyl thio-PC	pan-PLA ₂
62235	1,2-bis(heptanoylthio) Glycerophosphocholine	+sPLA ₂ , +iPLA ₂
62245	10-Pyrene-PC	+sPLA ₂ , +iPLA ₂

Inhibitors

Item No.	Product Name	Specificity
62120	Arachidonoyl Trifluoromethyl Ketone	+cPLA ₂ , +iPLA ₂
70700	Bromo-enol lactone	+iPLA ₂
10006800	(R)-Bromo-enol lactone	+iPLA ₂ γ
13179	FKGK 11	+iPLA ₂
13943	FKGK 18	+iPLA ₂
25130	GK187	+iPLA ₂
25732	(±)-trans-GK563	+iPLA ₂
70660	Methyl Arachidonoyl Fluorophosphonate	+cPLA ₂ , +iPLA ₂
13294	Pyrophenone	+cPLA ₂ α
17277	sPLA ₂ Inhibitor	+sPLA ₂ -IIA

Common PLA₂ inhibitors listed, over 30 available online

Autotaxin Research Tools

Protein and Antibody

Item No.	Product Name
10803	Autotaxin (human recombinant)
10005375	Lysophospholipase D Polyclonal Antibody

Inhibitors

Item No.	Product Name
27264	BMP-22
10498	HA-130
11034	HA-155
10010299	Oleoyl 3-carbacyclic Phosphatidic Acid
10010298	Palmitoleoyl 3-carbacyclic Phosphatidic Acid
10010293	Palmitoyl 3-carbacyclic Phosphatidic Acid
12018	PF-8380
13664	S32826

PLD Inhibitors

Item No.	Product Name	Summary
13207	CAY10594	PLD ₂ inhibitor, both <i>in vitro</i> (IC ₅₀ = 140 nM) and in cells (IC ₅₀ = 110 nM)
13563	FIPI	Inhibits both PLD ₁ (IC ₅₀ = 25 nM) and PLD ₂ (IC ₅₀ = 20 nM)
13205	Halopemide	PLD ₁ and PLD ₂ inhibitor <i>in vitro</i> (IC ₅₀ = 220 and 310 nM, respectively)
15349	ML-298	PLD ₂ inhibitor (IC ₅₀ = 355 nM)
17632	ML-299	PLD ₁ and PLD ₂ inhibitor (IC ₅₀ s = 6 and 20 nM, respectively)
10955	VU0359595	Inhibitor of PLD ₁ (IC ₅₀ = 3.7 nM)

LPA Receptor Research Tools

Antibodies

Item No.	Product Name	Summary
10005280	LPA ₁ Polyclonal Antibody	Immunogen: Human protein LPA ₁ · Host: Rabbit · Applications: ICC, IHC, WB
10004840	LPA ₃ Polyclonal Antibody	Immunogen: Mouse protein LPA ₃ · Host: Rabbit · Applications: ICC, WB

Agonists

Item No.	Product Name
21900	GRI-977143
10010164	1-Octadecyl Lysophosphatidic Acid*
10010093	1-Oleoyl Lysophosphatidic Acid*
10005707	(2S)-OMPT
10010094	1-Palmitoyl Lysophosphatidic Acid*

*Also available: sodium salt form

Screen for Inhibitors of Autotaxin

Autotaxin Inhibitor Screening Assay Kit

Item No. 700580

- Assay 45 samples in duplicate
- Plate-based colorimetric measurement
- Includes HA-155 as a positive control

Inhibition of human recombinant ATX by HA-155

Antagonists

Item No.	Product Name
22048	AM966
22049	BMS 986020
14663	H2L5186303
10012659	Ki16425
22051	LPA ₂ Antagonist 1

To view a complete list of our Phospholipase research tools,
visit us online at www.caymanchem.com