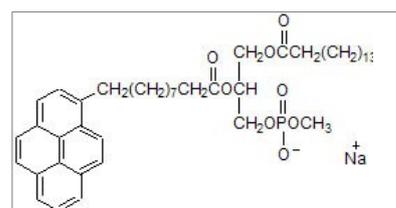




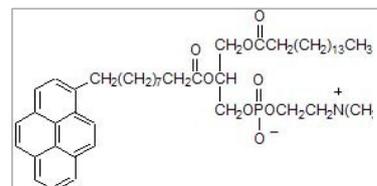
Fluorescent β -py-C₁₀ Phospholipids

Product Description

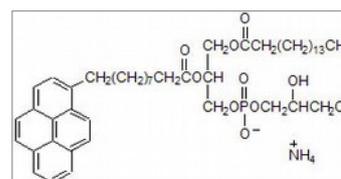
Name :	β-py-C₁₀-HPM 1-Hexadecanoyl-2-(1-pyrenedecanoyl)-sn-glycero-3-phosphomethanol, sodium salt
Catalog Number :	FP-31900A , 1mg
Structure :	C ₄₆ H ₆₆ O ₈ P.Na; CAS [223769-62-8]
Molecular Weight :	MW= 801.00
Solubility:	DMSO, DMF, 10% CH ₃ OH/CHCl ₃
Absorption / Emission :	$\lambda_{exc} \backslash \lambda_{em}$ (CH ₃ OH) = 340/375nm
Application	Fluorescent membrane probe Measurement of sPLA2 activity



Name :	β-py-C₁₀-HPC 1-Palmitoyl-2-(pyrene-1-yl)decanoyl-sn-glycero-3-phosphocholine 3,5,9-trioxa-4-phosphapentacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-10-oxo-7-((1-oxo-10-(1-pyrenyl) decyl)oxy)-hydroxide, inner salt, 4-oxide, (R)-(PPDPC) (PyrPC)
Catalog Number :	FP-73407A , 1mg
Structure :	C ₅₀ H ₇₆ NO ₈ P
Molecular Weight :	MW= 850.14 ; CAS [95864-17-8]
Solubility:	DMSO, DMF, 10% CH ₃ OH/CHCl ₃
Absorption / Emission :	$\lambda_{exc} \backslash \lambda_{em}$ (MetOH) = 343/377nm
Application	Probe for lipid metabolism and signaling which could be used for measuring lateral diffusion rates in membranes



Name :	β-py-C₁₀-PG 1-Hexadecanoyl-2-(1-pyrenedecanoyl)-sn-glycero-3-phosphoglycerol, ammonium salt pyrene-PG
Catalog Number :	FP- 73498A , 1mg
Structure :	C ₄₈ H ₇₄ NO ₁₀ P
Molecular Weight :	MW= 856.10
Solubility:	DMSO, DMF, 10% CH ₃ OH/CHCl ₃
Absorption / Emission :	$\lambda_{exc} \backslash \lambda_{em}$ (CH ₃ OH) = 340/376 nm
Application	Lipid metabolism and signaling probe PLA2 monitoring



Storage Store at -20°C. Protect from light and moisture

Technical and scientific information

Phospholipids, major components of biological membranes, have an important role in primary structural and as mediators in cellular signaling processes. Most phospholipids are derived from glycerol substituted by two fatty acyl residues (non-polar tails) and a phosphoryl alcohol (polar head group).

FluoProbes provide phosphocholine, phosphoglycerol and phosphomethanol lipids labeled with the pyrene group. Pyrene has strong fluorescence (340/376nm) (available as item #FP-33972A).

Fluorescent phospholipids are stable for at least one year properly stored (lyophilized, stored frozen at $\leq -20^{\circ}\text{C}$). They can be dissolved in DMSO, DMF or a mixture of 10% $\text{CH}_3\text{OH}/\text{CHCl}_3$ up to at least 20 mg/ml. Stock solutions should be frozen and protected from light.

Applications:

- phospholipase processes
- lipid sorting and trafficking
- carriers for labeling living cells
- labeling liposomes
- control for phospholipids analysis ([Luquain](#))

References:

β -py-C₁₀-HPM

- **Cajal Y.** *et al.* *Biochemistry* 36, 3882-3893 (1997).
- **Dong C.-Z.** *et al.*, *Biochemical Journal Immediate Publication*. [Article](#)
- **Koenig W.** *et al.*, *Eur. Heart J*, doi:10.1093/eurheartj/ehp302 (2009) [Article](#)
- **Mallat Z.** *et al.*, *Arteriosclerosis, Thrombosis, and Vascular Biology*. 27:1177 (2007) [Abstract](#)
- **Nicolas JP** *et al.* *J Biol Chem* 272, 7173-7181 (1997)
- **Ravandi A.** *et al.*, *The Journal of Lipid Research*, 52, 1829-1836 (2011) [Abstract](#)
- **Somerharju P.** *Chem Phys Lipids* 116, 57-74 (2002)
- **Valentin E.** *et al.* *J Biol Chem* 275, 7492-7496 (2000).
- **Zhi-Yi Z.** *et al.*, *Bioconjugate Chem.*, 11, 805-814 (2000) [Article](#)

β -py-C₁₀-HPC

- **Falck E.** *et al.*, *Biophysical Journal* 91:1787-1799 (2006) [Abstract](#)
- **Guillaume C.** *et al.*, Interplay between lipoproteins and bee venom phospholipase A2 in relation to their anti-plasmodium toxicity, *J. Lipid Res.*, 47: 1493 - 1506 (2006) [Article](#)
- **Hresko R.C.** *et al.* *Biochemistry* 25, 3813 (1986).
- **Malovrh P.** *et al.*, *Biochem. J.* 346:223-232 (2000) [Article](#)
- **Manevich Y.** *et al.*, Structure and phospholipase function of peroxiredoxin 6: identification of the catalytic triad and its role in phospholipid substrate binding, *Journal of Lipid Research*, Vol. 48, 2306-2318 (2007) [Article](#)
- **Mattila J-P.** *et al.*, *Biophys. J.* (2007) [Abstract](#)
- **Saaren-Seppälä H.** *et al.*, *Investigative Ophthalmology and Visual Science*. 46:3649-3656 (2005) [Article](#)

β -py-C₁₀-PG

- **Dua R.** *et al.*, *JBC*, 270, 1: 263-268 (1995) [Article](#)
- **Luquain C.** *et al.*, *Anal Biochem* 296, 41-48 (2001).
- Luquain [Méthode](#).
- **Redoules D.** *et al.*, *Skin Pharmacology and Applied Skin Physiology*; 12:182-192 (1999) [Article](#)
- **Ravaux L.** *et al.*, Inhibition of Interleukin-1 β -Induced Group IIA Secretory Phospholipase A2 Expression by Peroxisome Proliferator-Activated Receptors (PPARs) in Rat Vascular Smooth Muscle Cells: Cooperation between PPAR β and the Proto-Oncogene BCL-6 Δ , *MCB*, p. 8374-8387, Vol. 27, No. 23 (2007) [Article](#)
- **Singer AG.** *et al.*, *J Biol Chem* 277, 48535-49 (2002) .
- **Thomas G.** *et al.*, *J Biol Chem*, 275, 15:10876-10886 (2000) [Article](#)
- **Tuominen EK.** *et al.*, *J Biol Chem* 276, 19356-19362 (2001)

Related Products

- 1,6-diphenyl-1,3,5-hexatriene (DPH), [FP-12302A](#)
- 1-palmitoyl-2-oleoyl-3-phosphatidylcholine (POPC), [820758](#)
- 1-palmitoyl-2-oleoyl-3-phosphatidyl-glycerol (POPG), [603685](#)
- 11-(dansylamino) undecanoic acid (DAUDA), [FP-BT4700](#)

Ordering information

Catalog size quantities and prices may be found at <http://www.fluoprobes.com>
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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