



Catalog # 10-1449

Lysophosphatidic acid (oleoyl form) ·Na

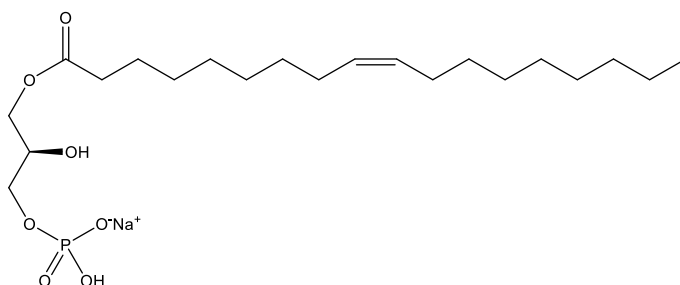
325465-93-8

LPA·Na

1-Oleoyl-2-hydroxy-sn-glycerol-3-phosphate, sodium

1-Oleoyl-lysophosphatidic acid, sodium salt

Lot # X101815



A multifunctional intercellular bioactive phospholipid¹. Stimulates the growth of a variety of cells including fibroblasts, vascular smooth muscle cells, endothelial cells and keratinocytes among others¹. Acts as a proliferative and anti-apoptotic factor². Agonist at LPA₁ (EDG-2), LPA₂ (EDG-4) and LPA₃ (EDG-7) receptors³. LPA-primed astrocytes induce axonal outgrowth of cortical progenitors⁴.

- 1) Moolenaar *et al.* (1995), *Lysophosphatidic acid, a multifunctional phospholipid messenger*; J. Biol. Chem., **270** 12949
- 2) Levine *et al.* (1997), *Lysophosphatidic acid; a novel growth and survival factor for renal proximal tubular cells*; Am. J. Physiol., **273** F575
- 3) Goetzl and An (1998), *Diversity of cellular receptors and functions for the lysophospholipid growth factors lysophosphatidic acid and sphingosine 1-phosphate*; FASEB J., **12** 1589
- 4) Spohr *et al.* (2014), *LPA-primed astrocytes induce axonal outgrowth of cortical progenitors by activating PKA signaling pathways and modulating extracellular matrix proteins*; Front Cell Neurosci., **8** 296

PHYSICAL DATA

Molecular Weight:	458.51
Molecular Formula:	C ₂₁ H ₄₀ O ₇ P·Na
Purity:	98% by TLC (may contain varying amounts of the 2-isomer) NMR: (Conforms)
Solubility:	DMSO (up to 1 mg/ml with warming), or Water (up to 10 mg/ml with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month. Solutions in water stable for 24hrs at 0°C.

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