1-Octadecyl Lysophosphatidic Acid (sodium salt)
Item No. 10010291

Formal Name: 1-Octadecyl-2-hydroxy-sn-glycero-3-phosphate, monosodium salt
Synonym: 1-Octadecyl LPA

MF: C_{21}H_{44}O_6P • Na
FW: 446.5
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that 1-octadecyl lysophosphatidic acid (sodium salt) (1-octadecyl LPA (sodium salt)) be stored as supplied at -20°C. It should be stable for at least two years.

1-Octadecyl LPA (sodium salt) is supplied as a crystalline solid. 1-Octadecyl LPA (sodium salt) is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

1-Octadecyl LPA (sodium salt) is a LPA analog containing stearyl alcohol at the sn-1 position. LPA binds to one of five different G protein-linked receptors to mediate a variety of biological responses including cell proliferation, smooth muscle contraction, platelet aggregation, neurite retraction, and cell motility.1,2 Alkyl ether-linked LPA derivatives have a higher platelet aggregating activity than the acyl derivatives, most likely stemming from an alkyl-specific LPA receptor. For example, 1-octadecyl LPA has platelet aggregating activity with an EC_{50} value of 9 nM versus an EC_{50} value of 177 nM for 1-octadecanoyl LPA.3

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10010291

WARNING: This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.