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DATASHEET

1-Oleoyl lysophosphatidic acid sodium salt

Product overview

Name 1-Oleoyl lysophosphatidic acid sodium salt

Cat No HB3373
Alternative names LPA
Biological action Inhibitor
Purity >95%

Description LPA1 and LPA2 agonist. Inhibits differentiation of neural stem cells (NSCs) into neurons.

Biological Data

Biological description Endogenous lysophospholipid LPA1 and LPA2 receptor agonist. Inhibits differentiation of neural stem

cells (NSCs) into neurons and is also commonly used for growth stimulation in a variety of cell lines.

Solubility & Handling

Solubility overview Soluble in PBS (10mM)

Storage instructions -20 °C

Storage of solutions Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if

storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Shipping Conditions

Important

Stable for ambient temperature shipping. Follow storage instructions on receipt.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use.

Chemical Data

Chemical name 1-*O*-9Z-Octadecenoyl-*sn*-glyceryl-3-p hosphoric acid sodium salt

Molecular Weight 458.5

Chemical structure

C₂₁H₄₀NaO₇P

Molecular Formula $C_{21}H_{40}NaO_7P$ CAS Number325465-93-8PubChem identifier44159357

 $\begin{array}{ll} \textbf{SMILES} & [\text{Na+}].\text{CCCCCCCC} \\ \text{C=C/CCCCCCC} \\ \text{C=O/OC[C@@H](O)COP(O)([O-])=O} \\ \textbf{InChiKey} & \text{XGRLSUFHELJJAB-JGSYTFBMSA-M} \\ \end{array}$

References

Rho/ROCK pathway is essential to the expansion, differentiation, and morphological rearrangements of human neural stem/progenitor cells induced by lysophosphatidic acid

Pebay et al (2013) J Lipd Res. 54(5)

PubMedID 23463731

Lysophosphatidic Acid Receptor Is a Functional Marker of Adult Hippocampal Precursor Cells

Kempermann et al (2016) Stem Cell Reports 6(4) **PubMedID** 27050949

The Role of Lysophosphatidic Acid in Adult Stem Cells

Kim et al (2020) Int J Stem Cells. 13(2)

PubMedID 32587135