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## Product Data Sheet

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Product Name: (S)-(-)-Linoleyl-1'-Hydroxy-2'-Propylamide

Cat. No.: GC41726

### Chemical Properties

Cas. No.

SMILES CCCCC/C=C\C/C=C\CCCCCCCC(N[C@@H](C)CO)=OFormula  $C_{21}H_{39}NO_2$ 

M.Wt 337.5

Solubility DMF: 11 mg/ml, DMSO: 5 mg/ml, Ethanol: 20 mg/ml, Ethanol: PBS (pH 7.2)(1:2): 0.3 mg/ml

Store  
Storage at -  
20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available sizes: ship with RT, or blue ice upon request.

Structure 

### Background

N-Acyl ethanolamines (NAEs) have diverse biological actions that are strongly affected by the associated acyl group. Linoleoyl ethanolamide (LOEA) has potential signaling roles in aging and neurological functioning. LOEA has a weak affinity for cannabinoid (CB) receptors ( $K_i = 10$  and  $25 \mu\text{M}$  for CB1 and CB2, respectively). It also inhibits fatty acid amide hydrolase (FAAH;  $K_i = 9 \mu\text{M}$ ) and is hydrolyzed by FAAH, and inhibits voltage-gated  $K^+$  channels. (S)-(-)-Linoleyl-1'-hydroxy-2'-propylamide is a homolog of LOEA, characterized by the addition of an (S)- $\alpha$ -methyl group at the methylene carbon adjacent to the amide nitrogen. A similar modification of arachidonoyl ethanolamide to produce S-1 methanandamide results in a diminished affinity for the CB receptor but greatly improved metabolic stability to aminopeptidase hydrolysis. The physiological actions of this compound have not been evaluated.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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