# **Screening Libraries**

# LAP

Cat. No.: HY-44076 CAS No.: 85073-19-4 Molecular Formula: C<sub>16</sub>H<sub>16</sub>LiO<sub>3</sub>P Molecular Weight: 294.21 Others Target: Pathway: Others

Storage: 4°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

**Product** Data Sheet

# **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 25 mg/mL (84.97 mM; Need ultrasonic) H<sub>2</sub>O: 7.58 mg/mL (25.76 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.3989 mL	16.9947 mL	33.9893 mL
	5 mM	0.6798 mL	3.3989 mL	6.7979 mL
	10 mM	0.3399 mL	1.6995 mL	3.3989 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (8.50 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.50 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.50 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description

LAP (Lithium 2 minus 2 - phenyl - trimethylbenzoylphosphinate) is a kind of free radical initiator. The free radicals produced by LAP under bioprinting conditions are potentially cytotoxic and mutagenic<sup>[1]</sup>.

## **REFERENCES**

[1]. Nguyen AK, et al. The Photoinitiator Lithium Phenyl (2,4,6-Trimethylbenzoyl) Phosphinate with Exposure to 405 nm Light Is Cytotoxic to Mammalian Cells but Not

Mutagenic in Bacterial Reverse Mutation Assays. Polymers (Basel). 2020 Jul 3;12(7):1489.							
	Caution: Product has not been fully validated for medical applications. For research use only.						
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