# **Screening Libraries**

# Monoethyl phthalate

Cat. No.: HY-133668 CAS No.: 2306-33-4 Molecular Formula:  $C_{10}H_{10}O_4$ Molecular Weight: 194.18

Target: **Drug Metabolite** 

Pathway: Metabolic Enzyme/Protease Storage: Pure form -20°C 3 years

> 2 years -80°C In solvent

6 months -20°C 1 month

**Product** Data Sheet

# **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (514.99 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	5.1499 mL	25.7493 mL	51.4986 mL
	5 mM	1.0300 mL	5.1499 mL	10.2997 mL
	10 mM	0.5150 mL	2.5749 mL	5.1499 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 (12.87 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (12.87 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (12.87 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description

Monoethyl phthalate is a metabolite of diethyl phthalate. Monoethyl phthalate acts as a urinary biomarker of phthalates exposure indicating the risks of thyroid cancer and benign nodule<sup>[1]</sup>.

# **REFERENCES**

[1]. Chong Liu, et al. Urinary biomarkers of phthalates exposure and risks of thyroid cancer and benign nodule. J Hazard Mater. 2020 Feb 5;383:121189.

2]. Celal Güven, et al. Low dos 1016 Jul;93:41-50.	e monoethyl phthalate (MEF	') exposure triggers proliferation b	y activating PDX-1 at 1.1B4 human pancreatic bet	a cells. Food Chem Toxicol.
	Caution: Product has n	ot been fully validated for me	dical applications. For research use only.	
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