# **Diethyl succinate**

Cat. No.: HY-Y0836 CAS No.: 123-25-1 Molecular Formula: C<sub>8</sub>H<sub>14</sub>O<sub>4</sub> Molecular Weight: 174.19

Target: **Biochemical Assay Reagents** 

Pathway: Others

Storage: Pure form -20°C 3 years

4°C 2 years

-80°C In solvent 6 months

> -20°C 1 month

**Product** Data Sheet

### **SOLVENT & SOLUBILITY**

DMSO: ≥ 250 mg/mL (1435.21 mM) In Vitro

\* "≥" means soluble, but saturation unknown.

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|-------------------------------|-----------|------------|------------|
|                              | 1 mM                          | 5.7409 mL | 28.7043 mL | 57.4086 mL |
|                              | 5 mM                          | 1.1482 mL | 5.7409 mL  | 11.4817 mL |
|                              | 10 mM                         | 0.5741 mL | 2.8704 mL  | 5.7409 mL  |

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (11.94 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description

Diethyl succinate (Diethyl Butanedioate) is used at physiological pH and crosses biological membranes, incorporates into cells in tissue culture and is metabolized by the TCA cycle. Diethyl succinate is known to be non-toxic and used in fragrances and flavoring<sup>[1]</sup>.

#### **REFERENCES**

[1]. Zacharias NM, et al. Real-time molecular imaging of tricarboxylic acid cycle metabolism in vivo by hyperpolarized 1-(13)C diethyl succinate. J Am Chem Soc. 2012 Jan 18;134(2):934-43.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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Page 2 of 2 www.MedChemExpress.com