**Proteins** 

# Inhibitors



## (S)-3,4-Dihydroxybutyric acid lithium hydrate

Cat. No.: HY-113304A Molecular Formula: C<sub>4</sub>H<sub>9</sub>LiO<sub>5</sub> Molecular Weight: 144.05

Target: **Endogenous Metabolite** Metabolic Enzyme/Protease Pathway:

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

H<sub>2</sub>O: 125 mg/mL (867.75 mM; Need ultrasonic)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|-------------------------------|-----------|------------|------------|
|                              | 1 mM                          | 6.9420 mL | 34.7102 mL | 69.4203 mL |
|                              | 5 mM                          | 1.3884 mL | 6.9420 mL  | 13.8841 mL |
|                              | 10 mM                         | 0.6942 mL | 3.4710 mL  | 6.9420 mL  |

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

In Vivo

1. Add each solvent one by one: PBS

Solubility: 100 mg/mL (694.20 mM); Clear solution; Need ultrasonic

### **BIOLOGICAL ACTIVITY**

(S)-3,4-Dihydroxybutyric acid (lithium hydrate) is a normal human urinary metabolite that is excreted in increased Description

concentration in patients with succinic semialdehyde dehydrogenase (SSADH) deficiency<sup>[1]</sup>.

IC<sub>50</sub> & Target Microbial Metabolite Human Endogenous Metabolite

#### **REFERENCES**

[1]. Shinka T, et al. Rapid and sensitive detection of urinary 4-hydroxybutyric acid and its related compounds by gas chromatography-mass spectrometry in a patient with succinic semialdehyde dehydrogenase deficiency. J Chromatogr B Analyt Technol Biomed Life Sci. 2002 Aug 25;776(1):57-63.

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

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com