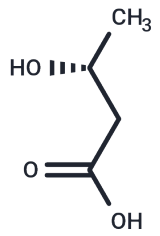
Data Sheet (Cat.No.T5248)

TargetMol

(R)-3-Hydroxybutanoic acid

Chemical Properties



CAS No. : 625-72-9

Formula: C4H8O3

Molecular Weight: 104.1

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	3-hydroxybutyric acid is involved in the synthesis and degradation of ketone bodies. Like the other ketone bodies (acetoacetate and acetone), levels of beta-hydroxybutyrate are raised in the blood and urine in ketosis. Beta-hydroxybutyrate is a typical partial-degradation product of branched-chain amino acids (primarily valine) released from muscle for hepatic and renal gluconeogenesis.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	H2O: 25 mg/mL (240.15 mM),Sonication is recommended. DMSO: 247.5 mg/mL (2377.52 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	9.6061 mL	48.0307 mL	96.0615 mL
5 mM	1.9212 mL	9.6061 mL	19.2123 mL
10 mM	0.9606 mL	4.8031 mL	9.6061 mL
50 mM	0.1921 mL	0.9606 mL	1.9212 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Pan JW, et al. Human brain beta-hydroxybutyrate and lactate increase in fasting-induced ketosis. J Cereb Blood Flow Metab. 2000 Oct;20(10):1502-7.

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