Data Sheet (Cat.No.T65133)

TargetMol

3-Hydroxybutyric acid sodium

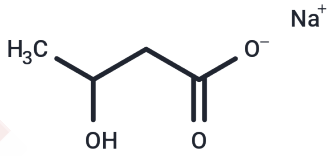
Chemical Properties

CAS No. : 150-83-4

Formula: C4H7NaO3

Molecular Weight: 126.09

Storage: 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 sodium (β-Hydroxybutyric acid sodium) is a metabolite found in type I diabetic patients that regulates membrane lipids.
Targets(IC50)	Endogenous Metabolite
In vitro	The 3-Hydroxybutyric acid medium can interact with lipids (using DPPC monolayer modeling) and alter phase behavior at clinical concentrations. The 3-Hydroxybutyric acid solid also reduces the interfacial viscosity of the DPPC monolayer.[1]

Solubility Information

Solubility	H2O: 22.5 mg/mL (178.44 mM),Sonication and heating to 60°C are recommended. DMSO: 20.7 mg/mL (164.17 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2.5 mg/mL (19.83 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	7.9308 mL	39.6542 mL	79.3084 mL
5 mM	1.5862 mL	7.9308 mL	15.8617 mL
10 mM	0.7931 mL	3.9654 mL	7.9308 mL
50 mM	0.1586 mL	0.7931 mL	1.5862 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

Hsu TT, et al. 3-Hydroxybutyric acid interacts with lipid monolayers at concentrations that impair consciousness. Langmuir. 2013 ; 29(6):1948-1955.