Data Sheet (Cat.No.T14031)

TargetMol

3-Hydroxyhippuric acid

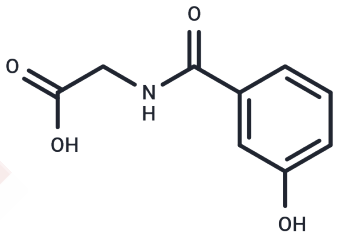
Chemical Properties

CAS No. : 1637-75-8

Formula: C9H9NO4

Molecular Weight: 195.17

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-Hydroxyhippuric acid is an acylglycine compound and inhibits kynureninase (Ki = 60 μM).3-Hydroxyhippuric acid shows significantly higher in vivo concentrations in the autism model group compared with the control group.It is also a characteristic biomarker of Clostridium and is positively correlated with Clostridium abundance.In addition, 3-hydroxyhippuric acid is one of the major metabolites of catechin diets and wine polyphenol diets.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 66 mg/mL (338.17 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: 3.3 mg/mL (16.91 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	5.1237 mL	25.6187 mL	51.2374 mL
5 mM	1.0247 mL	5.1237 mL	10.2475 mL
10 mM	0.5124 mL	2.5619 mL	5.1237 mL
50 mM	0.1025 mL	0.5124 mL	1.0247 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

Xiong, X. , et al. , (2016). Urinary 3-(3-Hydroxyphenyl)-3-hydroxypropionic Acid, 3-Hydroxyphenylacetic Acid, and 3-Hydroxyhippuric Acid Are Elevated in Children with Autism Spectrum Disorders. BioMed research international, 2016, 9485412.

Gonthier, M. P., et al., (2003). Microbial aromatic acid metabolites formed in the gut account for a major fraction of the polyphenols excreted in urine of rats fed red wine polyphenols. The Journal of nutrition, 133(2), 461-467.

Lima, S., Kumar, S., (2009). Crystal structure of the Homo sapiens kynureninase-3-hydroxyhippuric acid inhibitor complex: insights into the molecular basis of kynureninase substrate specificity. Journal of medicinal chemistry, 52 (2), 389-39