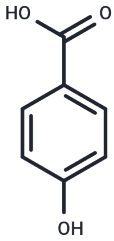
Data Sheet (Cat.No.T2989)

TargetMol

4-Hydroxybenzoic acid

Chemical Properties



CAS No. : 99-96-7

Formula: C7H6O3

Molecular Weight: 138.12

Storage: Keep away from direct sunlight
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	4-Hydroxybenzoic acid (4-hydroxybenzoate) is a monohydroxybenzoic acid, a phenolic derivative of benzoic acid. It is a white crystalline solid that is slightly soluble in water and chloroform but more soluble in polar organic solvents such as alcohols. It could inhibit most gram-positive and some gram-negative bacteria, with an IC50 of 160 μg/mL.
Targets(IC50)	Endogenous Metabolite,Antibacterial

Solubility Information

Solubility	DMSO: 245 mg/mL (1773.82 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: 5 mg/mL (36.2 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	7.2401 mL	36.2004 mL	72.4008 mL
5 mM	1.448 mL	7.2401 mL	14.4802 mL
10 mM	0.724 mL	3.620 mL	7.2401 mL
50 mM	0.1448 mL	0.724 mL	1.448 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

Farhoosh R, et al. Food Chem. 2016 Mar 1;194:128-34.
Shim K S, Hwang Y H, Jang S A, et al. Ethanol Extract of Amomum tsao-ko Ameliorates Ovariectomy-Induced Trabecular Loss and Fat Accumulation. Molecules. 2021 Feb 3;26(4):784. doi: 10.3390/molecules26040784.
Jang S A, Hwang Y H, Kim T, et al. Anti-Osteoporotic and Anti-Adipogenic Effects of the Water Extract of Drynaria roosii Nakaike in Ovariectomized Mice Fed a High-Fat Diet. Molecules. 2019, 24(17): 3051
Jang S A, Hwang Y H, Kim T, et al. Anti-Osteoporotic and Anti-Adipogenic Effects of the Water Extract of Drynaria roosii Nakaike in Ovariectomized Mice Fed a High-Fat Diet[J]. Molecules. 2019, 24(17): 3051.
Shim K S, Hwang Y H, Jang S A, et al. Ethanol Extract of Amomum tsao-ko Ameliorates Ovariectomy-Induced Trabecular Loss and Fat Accumulation[J]. Molecules. 2021, 26(4): 784.