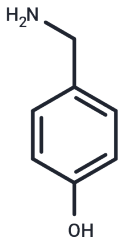
Data Sheet (Cat.No.T21095)

TargetMol

4-Hydroxybenzylamine

Chemical Properties



CAS No. : 696-60-6

Formula: C7H9NO

Molecular Weight: 123.15

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	4-Hydroxybenzylamine (4-HOBA) is a less reactive isomer of 2-HOBA as well as related compounds in a mouse model of hypertension.
Targets(IC50)	Endogenous Metabolite
In vivo	4-HOBA attenuated the left ventricular (LV) and lung IsoLGs in mice after TAC. 4-HOBA attenuated TAC-induced LV hypertrophy, heart failure, and the increase of lung weight in mice, and also improved TAC-induced LV dysfunction. Moreover, 4-HOBA effectively attenuated LV cardiomyocyte hypertrophy, lung inflammation, lung fibrosis[3].

Solubility Information

Solubility	DMSO: 50 mg/mL (406.01 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 mg/mL (16.24 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	8.1202 mL	40.6009 mL	81.2018 mL
5 mM	1.624 mL	8.1202 mL	16.2404 mL
10 mM	0.812 mL	4.0601 mL	8.1202 mL
50 mM	0.1624 mL	0.812 mL	1.624 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

Frandsen HB, et al. Glutamine as an Ammonia Donor in Catabolism of the Glucosinolate, Sinalbin, in Biosynthesis of 4-Hydroxybenzylamine. J Nat Prod. 2020 Feb 28;83(2):179-184.
Prinsen JK, et al. Highly Reactive Isolevuglandins Promote Atrial Fibrillation Caused by Hypertension. JACC Basic Transl Sci. 2020 May 27;5(6):602-615.
Shang L, et al. Isolevuglandin scavenger attenuates pressure overload-induced cardiac oxidative stress, cardiac hypertrophy, heart failure and lung remodeling. Free Radic Biol Med. 2019 Sep;141:291-298.