

Product Data Sheet

p-Hydroxymandelic acid

Cat. No.: HY-113027 CAS No.: 1198-84-1 Molecular Formula: $C_8H_8O_4$ Molecular Weight: 168.15

Target:Endogenous MetabolitePathway:Metabolic Enzyme/Protease

Powder

 $\begin{tabular}{ll} $4^{\circ}C$ & 2 years \\ In solvent & $-80^{\circ}C$ & 6 months \\ \end{tabular}$

-20°C

-20°C 1 month

3 years

SOLVENT & SOLUBILITY

In Vitro

Storage:

DMSO: 22.22 mg/mL (132.14 mM; ultrasonic and warming and adjust pH to 2 with 1M HCl and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	5.9471 mL	29.7354 mL	59.4707 mL
	5 mM	1.1894 mL	5.9471 mL	11.8941 mL
	10 mM	0.5947 mL	2.9735 mL	5.9471 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.22 mg/mL (13.20 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline) Solubility: \geq 2.22 mg/mL (13.20 mM); Clear solution

BIOLOGICAL ACTIVITY

Description p-Hydroxymandelic acid is a valuable aromatic fine chemical and widely used for production of pharmaceuticals and food additives.

In Vitro

p-Hydroxymandelic acid (4-Hydroxymandelic acid; 4-HMA) is widely used in production of aromatic drugs and flavors. It is employed for the preparation of 4-hydroxyphenylacetic acid, which is the synthetic precursor of selective β1-receptor antagonist drug atenolol. p-Hydroxymandelic acid can conjugate cytotoxic drug and enzyme substrate, and such a p-Hydroxymandelic acid based adaptor system showed promising application in the targeting drug delivery system^[1].

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$

REFERENCES				
1]. Li FF, et al. Engineering E	scherichia coli for production	of 4-hydroxymandelic acid using	g glucose-xylosemixture. Microb Cel	l Fact. 2016 May 27;15:90.
	Caution: Product has I	not been fully validated for n	nedical applications. For researc	ch use only.
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