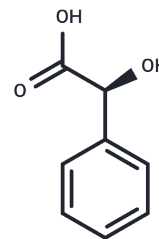


## (S)-Mandelic acid

## Chemical Properties

CAS No. :	17199-29-0
Formula:	C <sub>8</sub> H <sub>8</sub> O <sub>3</sub>
Molecular Weight:	152.15
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	(S)-Mandelic acid is the (S)-isomer of Mandelic Acid, exhibiting affinity activity (K <sub>i</sub> =100 μM) for Aldo-keto reductase family 1 member B1.
Targets(IC50)	Others
In vitro	(S)-Mandelic acid undergoes chiral inversion when incubated with intestinal bacteria of SD rats for 24 hours, converting to (R)-glycolic acid [1]. (S)-Mandelic acid undergoes chiral inversion when co-incubated with hepatocytes of SD rats for 2 hours, reverting to (R)-glycolic acid [1].
In vivo	After oral administration of a single dose of 100 mg/kg (S)-Mandelic acid to SD rats, the compound undergoes metabolic conversion in vivo to generate (R)-Glycolic acid [1].

## Solubility Information

Solubility	DMSO: 80 mg/mL (525.8 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.5725 mL	32.8623 mL	65.7246 mL
5 mM	1.3145 mL	6.5725 mL	13.1449 mL
10 mM	0.6572 mL	3.2862 mL	6.5725 mL
50 mM	0.1314 mL	0.6572 mL	1.3145 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

Gao, L. B., et al., (2012). Study on the metabolic mechanism of chiral inversion of S-mandelic acid in vitro. Chirality, 24(1), 86-95.

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