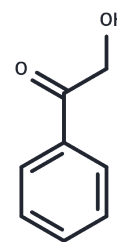


## 2-Hydroxyacetophenone

## Chemical Properties

CAS No. :	582-24-1
Formula:	C <sub>8</sub> H <sub>8</sub> O <sub>2</sub>
Molecular Weight:	136.15
Storage:	Store under nitrogen Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	2-Hydroxyacetophenone is the major volatile compound found in the roots of <i>Carissa edulis</i> (sweet carissa), a plant in the Apocynaceae family. 2-Hydroxyacetophenone exhibits antiviral activity and inhibits the infection of HIV/SARS-CoV S pseudoviruses in vitro, with an IC <sub>50</sub> of 1.8 mM. 2-Hydroxyacetophenone is a specific substrate for <i>Lactobacillus brevis</i> alcohol dehydrogenase (LBADH). 2-Hydroxyacetophenone can serve as a synthetic building block for the construction of complex aromatic heterocyclic molecules.
Targets(IC50)	HIV Protease,SARS-CoV
In vitro	2-Hydroxyacetophenone inhibits infection by HIV/SARS-CoV S pseudoviruses, with an IC <sub>50</sub> of 1.8 mM.[2] 2-Hydroxyacetophenone is a substrate for <i>Lactobacillus brevis</i> alcohol dehydrogenase (LBADH).[3]

## Solubility Information

Solubility	DMSO: 10 mg/mL (73.45 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	7.3448 mL	36.7242 mL	73.4484 mL
5 mM	1.469 mL	7.3448 mL	14.6897 mL
10 mM	0.7345 mL	3.6724 mL	7.3448 mL
50 mM	0.1469 mL	0.7345 mL	1.469 mL

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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

Bentley MD, et al. 2-Hydroxyacetophenone: principal root volatile of the East African medicinal plant, *Carissa edulis*. *J Nat Prod*. 1984;47(6):1056-1057.

Zhuang M, et al. Procyanidins and butanol extract of *Cinnamomi Cortex* inhibit SARS-CoV infection. *Antiviral Res*. 2009;82(1):73-81.

Rodríguez C, et al., Steric vs. electronic effects in the *Lactobacillus brevis* ADH-catalyzed bioreduction of ketones. *Org Biomol Chem*. 2014 Jan 28;12(4):673-81.

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