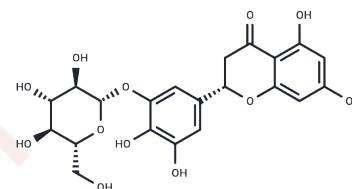


## Plantagoside

## Chemical Properties

CAS No. :	78708-33-5
Formula:	C <sub>21</sub> H <sub>22</sub> O <sub>12</sub>
Molecular Weight:	466.39
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	Plantagoside is a specific non-competitive inhibitor for jack bean alpha-mannosidase (IC <sub>50</sub> : 5 μM). It also is a potent inhibitor of the Maillard reaction.
Targets(IC <sub>50</sub> )	Others

## Solubility Information

Solubility	DMSO: 9 mg/mL (19.3 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: 1 mg/mL (2.14 mM), Sonication is recommended. <i>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.</i>

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1441 mL	10.7206 mL	21.4413 mL
5 mM	0.4288 mL	2.1441 mL	4.2883 mL
10 mM	0.2144 mL	1.0721 mL	2.1441 mL
50 mM	0.0429 mL	0.2144 mL	0.4288 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

Matsuura N, et al. Potent protein glycation inhibition of plantagoside in Plantago major seeds. Biomed Res Int. 2014;2014:208539.

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Yamada H, et al. Plantagoside, a novel alpha-mannosidase inhibitor isolated from the seeds of Plantago asiatica, suppresses immune response. Biochem Biophys Res Commun. 1989 Dec 29;165(3):1292-8.

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