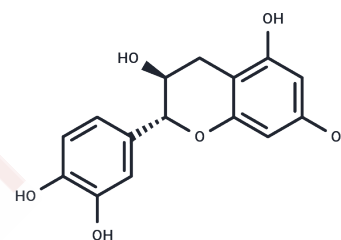


(±)-Catechin**Chemical Properties**

CAS No. : 7295-85-4
 Formula: C₁₅H₁₄O₆
 Molecular Weight: 290.27
 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	(±)-Catechin ((±)-Catechin hydrate) hydrate is a natural product, has antioxidant activity and is effective in reducing oxidative stress.
Targets(IC50)	COX, ROS
In vivo	(+)-catechin hydrate has antioxidant activity and is effective in reducing oxidative stress. The study is of clinical importance as oxidative stress is known to be the cause of many clinical manifestations viz. cancer, Parkinson's disease, atherosclerosis, heart failure, myocardial infarction and many other diseases[1].

Solubility Information

Solubility	DMSO: 126 mg/mL (434.08 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: 3.3 mg/mL (11.37 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	3.4451 mL	17.2253 mL	34.4507 mL
5 mM	0.689 mL	3.4451 mL	6.8901 mL
10 mM	0.3445 mL	1.7225 mL	3.4451 mL
50 mM	0.0689 mL	0.3445 mL	0.689 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

- Mehra P , Garg M , Koul A , et al. Effect of (+)-catechin hydrate on oxidative stress induced by high sucrose and high fat diet in male Wistar rats[J]. Indian journal of experimental biology, 2013, 51(10):823-827.
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