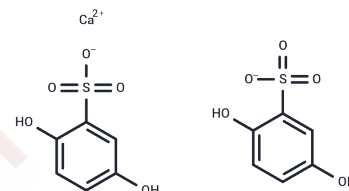


Calcium dobesilate

Chemical Properties

CAS No. : 20123-80-2
 Formula: C₁₂H₁₀CaO₁₀S₂
 Molecular Weight: 418.40
 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	Calcium dobesilate(CaD) has angioprotective properties and protects endothelial cells partly by ameliorating HG induced inflammation.
Targets(IC50)	Apoptosis
In vitro	CaD inhibited abnormal cell proliferation. high glucose (HG) treatment also significantly enhanced HVUEC migration compared to the control treatment. In contrast, CaD treatment partially inhibited HUVEC migration compared to HG exposure. HG?reated HUVECs exhibited increased FITC?BSA permeability compared to control cells cultured in medium alone; however, CaD application prevented the HG?induced increase in FITC? BSA permeability and suppressed HG?induced overexpression of endothelial markers (VEGF, VEGFR?2, endocan) and inflammation markers (ICAM?1, MCP?1, PTX3) in HUVECs. CaD has angioprotective properties and protects endothelial cells partly by ameliorating HG?induced inflammation[1].
Cell Research	HUVECs were seeded in 96-well culture plates (1×10 ⁴ cells/well). Following 24 h, the control or experimental medium was added. At 12, 24, 48 and 72 h, 10 µl CCK-8 reagent was added to each well for 1 h. Absorbance values were recorded at a wavelength of 450 nm using a microplate reader[1].

Solubility Information

Solubility	DMSO: 50.00 mg/mL (119.50 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: 2.00 mg/mL (4.78 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	2.3901 mL	11.9503 mL	23.9006 mL
5 mM	0.478 mL	2.3901 mL	4.7801 mL
10 mM	0.239 mL	1.195 mL	2.3901 mL
50 mM	0.0478 mL	0.239 mL	0.478 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

Zhou Y, Yuan J, Qi C et al. Calcium dobesilate may alleviate diabetes-induced endothelial dysfunction and inflammation. *Mol Med Rep* [J]. 2017 Dec;16(6):8635-8642.

Professor Hervé Allain, Ramelet A A , Polard E , et al. Safety of Calcium Dobesilate in Chronic Venous Disease, Diabetic Retinopathy and Haemorrhoids [J]. *Drug Safety*, 2004, 27(9):649-660.

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