

Gallocatechin gallate

Chemical Properties

CAS No. : 5127-64-0

Formula: C₂₂H₁₈O₁₁

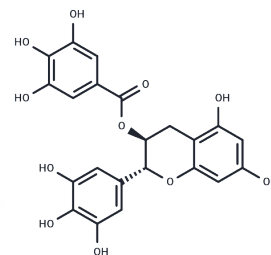
Molecular Weight: 458.37

Storage:

Keep away from moisture, Keep away from direct sunlight, Store at low temperature

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	Gallocatechin gallate is a flavonoid compound isolated from South American snake plant, with antiviral activity by inhibiting the entry and release stages of pseudorabies virus replication.
Targets(IC50)	Antifungal
In vitro	Gallocatechin gallate effectively inhibited the replication of Pseudorabies virus (PRV) with IC ₅₀ of 0.41 μM. [1] Gallocatechin gallate showed effective inhibitory activity against SARS-CoV-2 with IC ₅₀ of 5.774 μM. [4]
In vivo	Gallocatechin gallate (100 mg/kg/ day for 20 weeks) and water administration, which resulted in a significant reduction in food consumption and water intake in db/db mice, had the ability to prevent excessive weight gain in db/db mice. [2] Gallocatechin gallate is presented in three dose levels (12.5 mg/mL; 25 mg/mL; Mice irradiated with UVB once daily for 6 days showed that Gallocatechin gallate protects the skin from UVB-induced light damage by improving skin elasticity and collagen fibers, inhibiting mitochondrial aberration and melansome formation. [3]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1816 mL	10.9082 mL	21.8164 mL
5 mM	0.4363 mL	2.1816 mL	4.3633 mL
10 mM	0.2182 mL	1.0908 mL	2.1816 mL
50 mM	0.0436 mL	0.2182 mL	0.4363 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

- Bo Z, et al. Galliccatechin Gallate Inhibits the Replication of Pseudorabies Virus via Suppressing the Entry and Release Stages in Its Replication Cycle. *Vet Sci.* 2023 Mar 1;10(3):189.
- Xiao X, et al. (-)-Galliccatechin Gallate Mitigates Metabolic Syndrome-Associated Diabetic Nephropathy in db/db Mice. *Foods.* 2024 Jun 3;13(11):1755.
- Sheng YY, et al. Protective effects of galliccatechin gallate against ultraviolet B induced skin damages in hairless mice. *Sci Rep.* 2022 Jan 25;12(1):1310.
- Xiao T, et al. Both Baicalein and Galliccatechin Gallate Effectively Inhibit SARS-CoV-2 Replication by Targeting Mpro and Sepsis in Mice. *Inflammation.* 2022 Jun;45(3):1076-1088.

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481