

(-)-Epiafzelechin 3-O-gallate

Chemical Properties

CAS No.:	108907-43-3
Formula:	C ₂₂ H ₁₈ O ₉
Molecular Weight:	426.4
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	(-)-Epiafzelechin 3-O-gallate has antioxidant activity.
Targets(IC ₅₀)	Others: None
In vitro	METHODS AND RESULTS: Eight compounds were isolated from the water extract of Pu-erh tea and their structures were elucidated by NMR and MS as gallic acid (1), (+)-catechin (2), (-)-epicatechin (3), (-)-epicatechin-3-O-gallate (4), (-)-epigallocatechin-3-O-gallate (5), (-)-Epiafzelechin 3-O-gallate (6), kaempferol (7), and quercetin (8). Their in vitro antioxidant activities were assessed by the DPPH and ABTS scavenging methods with microplate assays. The relative order of DPPH scavenging capacity for these compounds was compound 8 > compound 7 > compound 1 > compound 6 > compound 4 ≈ compound 5 > compound 2 > VC (reference) > compound 3, and that of ABTS scavenging capacity was compound 1 > compound 2 > compound 7 ≈ compound 8 > compound 6 > compound 5 > compound 4 > VC (reference) > compound 3. CONCLUSIONS: The results showed that these phenolic compounds contributed to the antioxidant activity of Pu-erh tea.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.345 mL	11.726 mL	23.452 mL
5 mM	0.469 mL	2.345 mL	4.690 mL
10 mM	0.235 mL	1.173 mL	2.345 mL
50 mM	0.047 mL	0.235 mL	0.469 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Antioxidant phenolic compounds from Pu-erh tea. *Molecules*. 2012 Nov 27;17(12):14037-45.

Inhibitors · Natural Compounds · Compound Libraries

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