Natural Products

1,4-Dicaffeoylquinic acid Datasheet

4th Edition (Revised in July, 2016)

[ Product Information ]
Name: 1,4-Dicaffeoylquinic acid
Catalog No.: CFN99122
Cas No.: 1182-34-9
Purity: > 98%
M.F: C_{25}H_{24}O_{12}
M.W: 516.46
Physical Description: Yellow powder
Synonyms: 1,4-Bis[(E)-3-(3,4-dihydroxyphenyl)prop-2-enoyl]oxy]-3,5-dihydroxycyclohexane-1-carboxylic acid.

[ Intended Use ]
1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Ingredient in supplements, beverages;
7. Others.

[ Source ]
The flowerbud of Lonicera japonica Thunb.
[Biological Activity or Inhibitors]

All of the dicaffeoylquinic acids inhibit HIV-1 replication at concentrations ranging from 1 to 6 microM in T cell lines, whereas their toxic concentrations in the same cell lines were > 120 microM, and the compounds inhibit HIV-1 IN in vitro at submicromolar concentrations; indicates that the dicaffeoylquinic acids as a class are potent and selective inhibitors of HIV-1 IN and form important lead compounds for HIV drug discovery.[1]

Dicaffeoylquinic acids have antioxidant activities in the DPPH radical and superoxide anion radical scavenging systems. [2]

Dicaffeoylquinic acid derivatives show inhibitory activity on recombinant human AKR1B10 (rh AKR1B10) in the range of IC50 1.24-2.29 uM.[3]

[Solvent]

Pyridine, DMSO, Ethanol, Methanol.

[HPLC Method][4]

Mobile phase: Acetonitrile: 0.05% Formic acid H2O, gradient elution;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wave length of determination: 328 nm.

[Storage]

2-8°C, Protected from air and light, refrigerate or freeze.

[References]


[Contact]

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