LKT Laboratories, Inc.

Methyl Caffeate

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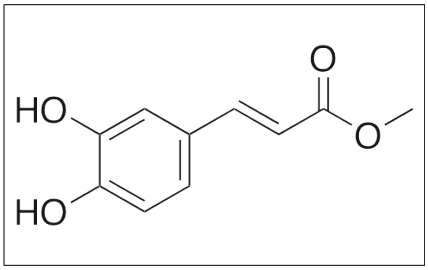
Product Information

Product ID M1560
CAS No. 3843-74-1
Chemical Name Methyl 3-(3,4-dihydroxyphenyl)-2-propenoate

Synonym 3,4-Dihydroxycinnamic acid methylester

Formula $C_{10}H_{10}O_4$
Formula Wt. 194.19
Melting Point 163-165°C
Purity ≥98%
Solubility Soluble in acetone, methanol, or DMSO.



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
M1560	50 mg	$67.40
M1560	100 mg	$119.90
M1560	500 mg	$479.40

Store Temp -20°C
Ship Temp Ambient

Description Methyl caffeate is a polyphenol found in species of *Solanum* and *Magnolia*; it exhibits antibiotic, anti-diabetic, antiviral, and anticoagulant activities. Methyl caffeate displays antibacterial efficacy against *Pseudomonas*, *Klebsiella*, and *Mycobacterium*. This compound also inhibits HIV replication and displays antiplatelet activity in various in vitro models. In diabetic rats, methyl caffeate decrease blood glucose levels and upregulates expression of GLUT4; it also inhibits α-glucosidase. Methyl caffeate exhibits weaker anticancer and chemopreventive activities than other caffeic acid esters.

References

Balachandran C, Duraipandiyan V, Al-Dhabi NA, et al. Antimicrobial and Antimycobacterial Activities of Methyl Caffeate Isolated from Solanum torvum Swartz. Fruit. Indian J Microbiol. 2012 Dec;52(4):676-81. PMID: 24293730.

Gandhi GR, Ignacimuthu S, Paulraj MG, et al. Antihyperglycemic activity and antidiabetic effect of methyl caffeate isolated from Solanum torvum Swartz. fruit in streptozotocin induced diabetic rats. Eur J Pharmacol. 2011 Nov 30;670(2-3):623-31. PMID: 21963451.

Takahashi K, Yoshioka Y, Kato E, et al. Methyl caffeate as an alpha-glucosidase inhibitor from Solanum torvum fruits and the activity of related compounds. Biosci Biotechnol Biochem. 2010;74(4):741-5. PMID: 20378981.

Ho CC, Lin SS, Chou MY, et al. Effects of CAPE-like compounds on HIV replication in vitro and modulation of cytokines in vivo. J Antimicrob Chemother. 2005 Aug;56(2):372-9. PMID: 16002419.

Pyo MK, Lee Y, Yun-Choi HS. Anti-platelet effect of the constituents isolated from the barks and fruits of Magnolia obovata. Arch Pharm Res. 2002 Jun;25(3):325-8. PMID: 12135105.

Rao CV, Desai D, Kaul B, et al. Effect of caffeic acid esters on carcinogen-induced mutagenicity and human colon adenocarcinoma cell growth. Chem Biol Interact. 1992 Nov 16;84(3):277-90. PMID: 1423745.