



LKT Laboratories, Inc.

Caffeic Acid

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Product Information

Product ID C0121

CAS No. 331-39-5

Chemical Name 3-(3,4-Dihydroxyphenyl)-2-propenoic acid

Synonym 3,4-Dihydroxycinnamic acid

Formula $C_9H_8O_4$

Formula Wt. 180.16

Melting Point 212-214°C(dec.)

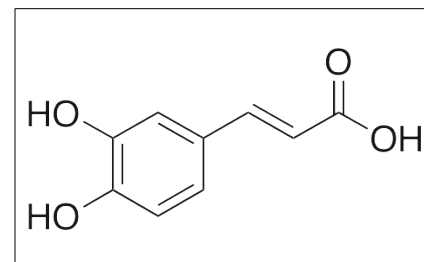
Purity ≥98%

Solubility Sparingly soluble in hot water, PBS (0.6 mg/mL). Soluble in ethanol (25 mg/mL, warm), DMSO (40 mg/mL), DMF (7 mg/mL), ethyl acetate.

Store Temp Ambient

Ship Temp Ambient

Description Caffeic acid is a hydroxycinnamic acid found in coffee, argan oil, *Eucalyptus*, *Salvinia*, and *Phellinus*; it exhibits antioxidative, anti-diabetic, antibiotic, anti-inflammatory, anti-metastatic, and anticancer activities. Caffeic acid inhibits activity of α -amylase and α -glucosidase. This compound also displays antibacterial efficacy, decreasing membrane stability and inhibiting proliferation of *Staphylococcus*. In vitro, caffeic acid increases levels of glutathione, glutathione peroxidase, and catalase; it also inhibits LPS-stimulated inflammation by decreasing activation of NF- κ B and levels of IL-6, IL-8, TNF- α , and IL-1 β . In lung adenocarcinoma cells, caffeic acid inhibits PMA-induced invasion and decreases activation of STAT3, AP-1, and NF- κ B. Additionally, caffeic acid induces G1 phase cell cycle arrest and apoptosis, decreases mitochondrial membrane potential, and inhibits cellular proliferation in colon cancer cells.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
C0121	5 g	\$45.70
C0121	25 g	\$128.40

References Obboh G, Agunloye OM, Adefegha SA, et al. Caffeic and chlorogenic acids inhibit key enzymes linked to type 2 diabetes (in vitro): a comparative study. *J Basic Clin Physiol Pharmacol*. 2014 May 12. [Epub ahead of print]. PMID: 24825096.

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Pluemsamran T, Onkoksoong T, Panich U. Caffeic acid and ferulic acid inhibit UVA-induced matrix metalloproteinase-1 through regulation of antioxidant defense system in keratinocyte HaCaT cells. *Photochem Photobiol*. 2012 Jul-Aug;88(4):961-8. PMID: 22360712.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.