



LKT Laboratories, Inc.

## Caffeic Acid

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

### 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.)

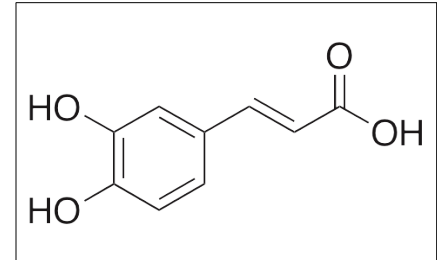
Purity ≥98%

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  $\alpha$ -amylase and  $\alpha$ -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- $\kappa$ B and levels of IL-6, IL-8, TNF- $\alpha$ , and IL-1 $\beta$ . In lung adenocarcinoma cells, caffeic acid inhibits PMA-induced invasion and decreases activation of STAT3, AP-1, and NF- $\kappa$ 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** Oboh 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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**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.