



LKT Laboratories, Inc.

## Ellagic Acid

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### Product Information

Product ID E4444

CAS No. 476-66-4

Chemical Name 2,3,7,8-Tetrahydroxy-[1]benzopyrano[5,4,3-cde][1]benzopyran-5,10-dione

Synonym Benzoaric acid, Lagistase.

Formula  $C_{14}H_6O_8$

Formula Wt. 302.20

Melting Point  $>300^{\circ}\text{C}$

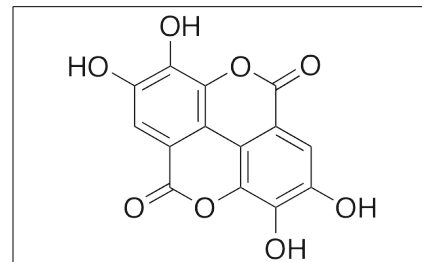
Purity  $\geq 98\%$

Solubility Very slightly soluble in water. Soluble in 1 N NaOH (10 mg/mL).

Store Temp Ambient

Ship Temp Ambient

**Description** Ellagic acid is a phenol found in various fruits that exhibits neuroprotective, anti-angiogenic, anti-inflammatory, anti-asthma, anti-allergic, antiviral, antioxidative, anti-parasitic, antimalarial, anticancer, and anti-ulcerative activities. Ellagic acid inhibits HIF-1 $\alpha$ -induced PI3K/Akt and VEGF/VEGFR2 signaling, downregulates expression of HDAC6, and suppresses neovascularization and angiogenesis in vitro and in vivo. In animal models of OVA-induced allergy, ellagic acid decreases eosinophil infiltration, Th2 cytokine release, IgE levels, and NF- $\kappa$ B activation, preventing airway hyperresponsiveness. In vitro, ellagic acid upregulates expression of HDAC9 and decreases differentiation of adipocytes. This compound inhibits proliferation of *Plasmodium* and *Rhinovirus*. In animal models of inflammation, ellagic acid increases levels of glutathione and IL-10 and decreases levels of NO, malondialdehyde, IL-1 $\beta$ , TNF- $\alpha$ , COX-2, and NF- $\kappa$ B. In pancreatic adenocarcinoma cells, this compound suppresses cellular proliferation and induces apoptosis. Ellagic acid also inhibits the formation of ulcers in animal models. TEST!!!!!!



### Pricing and Availability

**Bulk quantities available upon request**

| Product ID | Size | List Price |
|------------|------|------------|
| E4444      | 1 g  | \$67.40    |
| E4444      | 5 g  | \$134.80   |
| E4444      | 10 g | \$180.90   |
| E4444      | 50 g | \$613.50   |

**References** Zhou E, Fu Y, Wei Z, et al. Inhibition of allergic airway inflammation through the blockage of NF- $\kappa$ B activation by ellagic acid in an ovalbumin-induced mouse asthma model. *Food Funct.* 2014 Sep;5(9):2106-12. PMID: 24998475.

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