

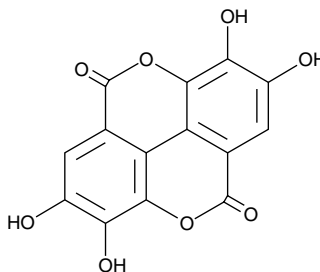
# Product Information



## Ellagic Acid

Item No. 10569

**CAS Registry No.:** 476-66-4  
**Formal Name:** 2,3,7,8-tetrahydroxy-[1]benzopyrano[5,4,3-cde][1]benzopyran-5,10-dione  
**Synonyms:** Gallogen, Lagistase, TBBD  
**MF:** C<sub>14</sub>H<sub>6</sub>O<sub>8</sub>  
**FW:** 302.2  
**Purity:** ≥95%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 256, 365 nm



### Laboratory Procedures

For long term storage, we suggest that ellagic acid be stored as supplied at -20°C. It should be stable for at least two years.

Ellagic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the ellagic acid in the solvent of choice. Ellagic acid is soluble in DMSO, which should be purged with an inert gas. The solubility of ellagic acid in DMSO is approximately 0.14 mg/ml.

Ellagic acid is sparingly soluble in aqueous buffers. An aqueous solution can best be prepared by diluting the organic solution into aqueous buffers or isotonic saline. We do not recommend storing the aqueous solution for more than one day.

Ellagic acid is a polyphenolic antioxidant that is abundant in many fruits, vegetables, plant bark, and peels. It has anti-carcinogenic, anti-mutagenic, anti-inflammatory, and organ-preserving properties, presumably related to its ability to alter cytochrome P450 activity and improve metabolism and clearance of xenobiotics, as well as alter immune function.<sup>1-3</sup> Ellagic acid also blocks methylation of arginine 17 of histone 3 (H3R17) by coactivator-associated arginine methyltransferase 1 (CARM1) without significantly altering histone acetylase or DNA methyltransferase activity.<sup>4-6</sup>

### References

1. Allen, C.T., Peden-Adams, M.M., EuDaly, J., *et al.* Subchronic exposure to ellagic acid impairs cytotoxic T-cell function and suppresses humoral immunity in mice. *Immunopharmacol. Immunotoxicol.* **25(3)**, 409-422 (2003).
2. Heber, D. Multitargeted therapy of cancer by ellagitannins. *Cancer Lett.* **269**, 262-268 (2008).
3. Girish, C. and Pradhan, S.C. Drug development for liver diseases: Focus on picroliv, ellagic acid and curcumin. *Fundam. Clin. Pharmacol.* **22**, 623-632 (2008).
4. Selvi, B.R., Batta, K., Kishore, A.H., *et al.* Identification of a novel inhibitor of coactivator-associated arginine methyltransferase 1 (CARM1)-mediated methylation of histone H3 Arg-17. *J. Biol. Chem.* **285(10)**, 7143-7152 (2010).
5. Paluszczak, J., Krajka-Kuzniak, V., and Baer-Dubowska, W. The effect of dietary polyphenols on the epigenetic regulation of gene expression in MCF7 breast cancer cells. *Toxicol. Lett.* **192(2)**, 119-125 (2010).
6. Lea, M.A., Ibeh, C., Han, L., *et al.* Inhibition of growth and induction of differentiation markers by polyphenolic molecules and histone deacetylase inhibitors in colon cancer cells. *Anticancer Res.* **30(2)**, 311-318 (2010).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10569](http://www.caymanchem.com/catalog/10569)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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