

# Ellagic acid

Catalog No: tcsc2067



## Available Sizes

Size: 1g

Size: 5g



## Specifications

**CAS No:**

476-66-4

**Formula:**

$C_{14}H_6O_8$

**Pathway:**

Stem Cell/Wnt;Cell Cycle/DNA Damage

**Target:**

Casein Kinase;Casein Kinase

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 0.75 mg/mL (2.48 mM; Need ultrasonic)

**Observed Molecular Weight:**

302.19

## Product Description

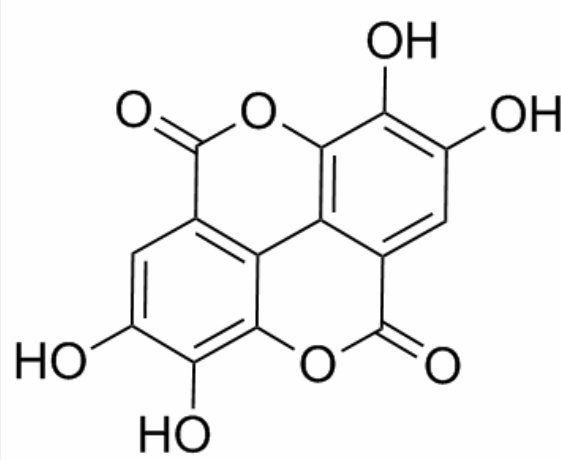
Ellagic acid is a natural antioxidant, and acts as a potent and ATP-competitive **CK2** inhibitor, with an **IC<sub>50</sub>** of 40 nM and a **K<sub>i</sub>** of 20 nM.

IC50 & Target: IC50: 40 nM (CK2)<sup>[1]</sup>

Ki: 20 (CK2)<sup>[1]</sup>

**In Vitro:** Ellagic acid is a potent CK2 inhibitor, with an  $IC_{50}$  of 40 nM and a  $K_i$  of 20 nM. Ellagic acid also blocks other kinases such as LYN, PKA, SYK, GSK3, FGR and CK1, with  $IC_{50}$ s of 2.9, 3.5, 4.3, 7.5, 9.4 and 13.0  $\mu$ M, respectively, and shows no obvious effects on DYRK1a, CSK, NPM-ALK, RET and FLT3 ( $IC_{50}$ s > 40  $\mu$ M). Ellagic acid (5-100  $\mu$ M) shows inhibitory activities against Karpas299, SUDHL1, SR786, and FE-PD cell lines<sup>[1]</sup>. Ellagic acid (10  $\mu$ M) exhibits cytotoxic effects on MCF-7 cells after treatment of radiation. Ellagic acid (10  $\mu$ M) in combination with Irradiation (IR) significantly abridges the capacity of MCF-7 cells to form colonies equated with individual treatments. Ellagic acid with IR also induces cell apoptosis, and facilitates the upregulation of pro-apoptotic Bax and downregulation of Bcl-2 in MCF-7 cells<sup>[3]</sup>.

**In Vivo:** Ellagic acid (EA; 10 mg/kg/day; p.o., 14 days) strongly decreases MDA brain content by 17%, and reduces the levels of brain TNF- $\alpha$  by 42% in rats. Ellagic acid markedly increases the reduced brain contents of 5-HT (39%), dopamine (DA, 71%), and norepinephrine (NE, 77%). Ellagic acid (10 mg/kg, p.o., 14 days) causes decreased histopathological changes induced by Doxorubicin in rats<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!