



LKT Laboratories, Inc.

Gallic Acid

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Product Information

Product ID G0145
CAS No. 149-91-7
Chemical Name 3,4,5-Trihydroxybenzoic acid

Synonym

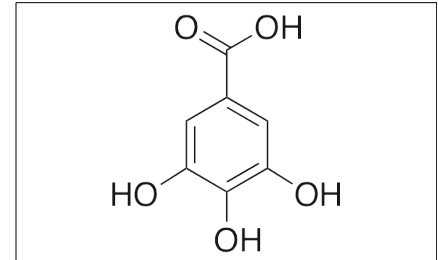
Formula C₇H₆O₅
Formula Wt. 170.12
Melting Point 235-240° C(dec.)
Purity ≥98%

Solubility Soluble in ethanol, acetone, DMSO, methanol. Slightly soluble in water (11.5 mg/mL).

Store Temp Ambient

Ship Temp Ambient

Description Gallic acid is a phenol found in various plants including sumac, oak, and witch hazel; it exhibits neuroprotective, antioxidative, anticancer, anti-metastatic, antibiotic, antacid, and anti-ulcerative activities. Gallic acid is commonly used as a standard for determining phenol content of analytes. Gallic acid scavenges ROS and displays benefit in animal models of cerebral ischemia/reperfusion. Gallic acid also induces Fas-mediated apoptosis in breast cancer cells and induces apoptosis and inhibits migration in osteosarcoma cells. This compound inhibits the production of α -hemolysin and cell adhesion in *Staphylococcus*. Additionally, gallic acid increases levels of glutathione peroxidase, glutathione, glutathione reductase, catalase, and superoxide dismutase and decreases levels of myeloperoxidase. In vivo, gallic acid decreases gastric acid secretion and ulcer formation.



Bulk quantities available upon request

Product ID	Size
G0145	10 g
G0145	100 g
G0145	500 g

References Sun J, Li YZ, Ding YH, et al. Neuroprotective effects of gallic acid against hypoxia/reoxygenation-induced mitochondrial dysfunctions in vitro and cerebral ischemia/reperfusion injury in vivo. *Brain Res.* 2014 Sep 22. [Epub ahead of print]. PMID: 25251593.

Wang K, Zhu X, Zhang K, et al. Investigation of gallic Acid induced anticancer effect in human breast carcinoma mcf-7 cells. *J Biochem Mol Toxicol.* 2014 Sep;28(9):387-93. PMID: 24864015.

Luis Â, Silva F, Sousa S, et al. Antistaphylococcal and biofilm inhibitory activities of gallic, caffeic, and chlorogenic acids. *Biofouling.* 2014 Jan;30(1):69-79. PMID: 24228999.

Liang W, Li X, Li Y, et al. Gallic acid induces apoptosis and inhibits cell migration by upregulating miR-518b in SW1353 human chondrosarcoma cells. *Int J Oncol.* 2014 Jan;44(1):91-8. PMID: 24173143.

Sen S, Asokkumar K, Umamaheswari M, et al. Antiulcerogenic effect of gallic Acid in rats and its effect on oxidant and antioxidant parameters in stomach tissue. *Indian J Pharm Sci.* 2013 Mar;75(2):149-55. PMID: 24019562.

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