



LKT Laboratories, Inc.

Genipin

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Product Information

Product ID G1853

CAS No. 6902-77-8

Chemical Name methyl (1R,4aS,7aS)-1-hydroxy-7-(hydroxymethyl)-1,4a,5,7a-tetrahydrocyclopenta[c]pyran-4-carboxylate

Synonym

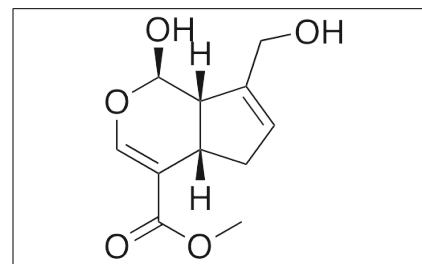
Formula C₁₁H₁₄O₅

Formula Wt. 226.23

Melting Point

Purity ≥99%

Solubility



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
G1853	25 mg	\$102.90
G1853	100 mg	\$288.80

Store Temp Ambient

Ship Temp Ambient

Description Genipin is an iridoid glycoside compound found in zhishi or *Gardenia jasminoides*; it is most well known for its protein cross-linking ability. Genipin displays anti-amnesic, wound healing, anticancer, neuroprotective, cognition enhancing, anti-inflammatory, and antioxidative activities. In animal models, genipin inhibits acetylcholine esterase (AChE), attenuating scopolamine-induced memory impairment. In ex vivo and in vivo models, genipin increases wound healing by inducing cross-linking of collagen. Genipin also exerts anticancer activity, as it increases the Bax/Bcl-2 ratio and induces PARP cleavage and caspase-3- and caspase-9-mediated apoptosis in non-small cell lung cancer (NSCLC) cells. In animal models, this compound upregulates nNOS and decreases acute inflammation through inhibition of LPS-induced NF-κB activity. Additionally, genipin inhibits Toll-like receptor (TLR) signaling and the production of pro-inflammatory cytokines, preventing sepsis and increasing survival in animal models of infection. Genipin also upregulates mitochondrial uncoupling protein 2 (UCP2) levels in the kidney, postponing progression of diabetic neuropathy in vivo.

References Liu TX, Wang Z. Collagen crosslinking of porcine sclera using genipin. *Acta Ophthalmol.* 2013 Jun;91(4):e253-7. PMID: 23710671.

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