



LKT Laboratories, Inc.

18B-Glycyrrhetic Acid

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Product Information

Product ID G4597

CAS No. 471-53-4

Chemical Name (3B,20B)-3-Hydroxy-11-oxolean-12-en-29-oic acid

Synonym Enoxolone, Uralenic acid, Arthrodont, Biosone

Formula C₃₀H₄₆O₄

Formula Wt. 470.68

Melting Point 296 °C

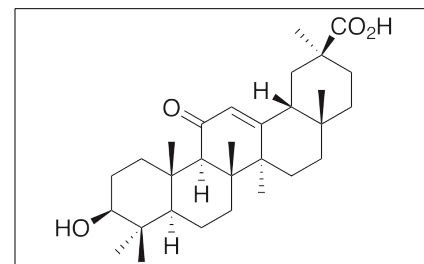
Purity ≥98%

Solubility Soluble in ethanol,
chloroform, dioxane,
pyridine or acetic acid.

Store Temp Ambient

Ship Temp Ambient

Description 18B-Glycyrrhetic Acid (enoxolone) is a triterpene glycoside found in *Glycyrrhiza* that exhibits anti-hyperlipidemic, anti-obesity, anti-inflammatory, anticancer, and anti-metastatic activities. Enoxolone is commercially used as a flavorant. Enoxolone inhibits 15-hydroxyprostaglandin dehydrogenase, altering the metabolism of prostaglandins E2 (PGE2) and F2 (PGF2). Enoxolone also modulates ion channel activity, inhibiting human ether-related-a-go-go (hERG) K⁺ channels and Kv1.3 K⁺ channels. In vitro, enoxolone prevents production of IL-2 and activation of T cells. In other cellular models, enoxolone decreases cellular invasion, expression of matrix metalloproteinase 9 (MMP9) and VEGF, and activity of NF-κB. This compound also induces apoptosis in non-small cell lung cancer (NSCLC) cells, decreasing expression of Bcl-2, Bcl-xl, cyclin D1, and cyclin E, increasing activation of caspases and PARP, and downregulating phosphorylation of JNK and PKC. In animal models, enoxolone inhibits anandamide-induced adipocyte differentiation, suppresses expression of fatty acid synthase, and decreases plasma lipid levels, fat weight, and body weight.



Bulk quantities available upon request

Product ID	Size
G4597	5 g
G4597	10 g
G4597	25 g

References Jayasooriya RG, Dilshara MG, Park SR, et al. 18B-Glycyrrhetic acid suppresses TNF-α induced matrix metalloproteinase-9 and vascular endothelial growth factor by suppressing the Akt-dependent NF-κB pathway. *Toxicol In Vitro*. 2014 Aug;28(5):751-8. PMID: 24613819.

Park M, Lee JH, Choi JK, et al. 18B-glycyrrhetic acid attenuates anandamide-induced adiposity and high-fat diet induced obesity. *Mol Nutr Food Res*. 2014 Jul;58(7):1436-46. PMID: 24687644.

Song J, Ko HS, Sohn EJ, et al. Inhibition of protein kinase C α/BII and activation of c-Jun NH2-terminal kinase mediate glycyrrhetic acid induced apoptosis in non-small cell lung cancer NCI-H460 cells. *Bioorg Med Chem Lett*. 2014 Feb 15;24(4):1188-91. PMID: 24461294.

Wu D, Jiang L, Wu H, et al. Inhibitory effects of glycyrrhetic Acid on the delayed rectifier potassium current in Guinea pig ventricular myocytes and HERG channel. *Evid Based Complement Alternat Med*. 2013;2013:481830. PMID: 24069049.

Fu XX, Du LL, Zhao N, et al. 18B-Glycyrrhetic acid potently inhibits Kv1.3 potassium channels and T cell activation in human Jurkat T cells. *J Ethnopharmacol*. 2013 Jul 9;148(2):647-54. PMID: 23707333.

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