



LKT Laboratories, Inc.

Glycyrrhizic Acid Ammonium Hydrate

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID G4598

CAS No. 53956-04-0

Chemical Name (3B,20B)-20-Carboxy-11-oxo-30-norolean-2-en-3-yl 2-O-B-D-glucopyranuronosyl-a-D-glucopyranosiduronic acid

Synonym Glycyrrhizin, glycyrrhizinic acid, glycyrrhetic acid glycoside

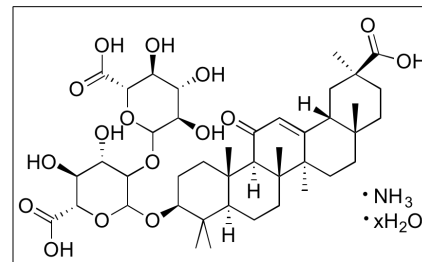
Formula $C_{42}H_{62}NO_{16} \cdot xH_2O$

Formula Wt. 839.97

Melting Point 209-211 °C

Purity ≥93%

Solubility Soluble in hot water or ethanol.



Bulk quantities available upon request

Product ID	Size
G4598	10 g
G4598	25 g

Store Temp Ambient

Ship Temp Ambient

Description Glycyrrhizin is a triterpene glycoside found in *Glycyrrhiza* that exhibits antiviral, anti-inflammatory, nephroprotective, neuroprotective, anticancer, chemopreventive, and antioxidative activities. Glycyrrhizin is commercially used as a flavorant and emulsifier. This compound inhibits 11B-hydroxysteroid dehydrogenase. Glycyrrhizin is occasionally clinically used to treat herpes virus infections, as it inhibits viral entry to host cells. Glycyrrhizin also inhibits renal ischemia/reperfusion injury in vivo by downregulating signaling of p38 MAPK and decreasing expression of IL-6, IL-1B, IFN-γ, and TNF-α. In vitro, glycyrrhizin decreases levels of ROS and malondialdehyde and increases levels of superoxide dismutase. In other in vitro models, glycyrrhizin prevents glial inflammation and kainic acid-induced neuronal death. This compound prevents the development of DMH-induced cancerous lesions in the colon, induces apoptosis and expression of p53, and decreases levels of inflammatory cytokines, COX-2, and VEGF; it also inhibits cellular proliferation and growth in prostate cancer cells.

References Ye S, Zhu Y, Ming Y, et al. Glycyrrhizin protects mice against renal ischemia-reperfusion injury through inhibition of apoptosis and inflammation by downregulating p38 mitogen-activated protein kinase signaling. *Exp Ther Med.* 2014 May;7(5):1247-1252. PMID: 24940420.

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Shetty AV, Thirugnanam S, Dakshinamoorthy G, et al. 18α-glycyrrhetic acid targets prostate cancer cells by down-regulating inflammation-related genes. *Int J Oncol.* 2011 Sep;39(3):635-40. PMID: 21637916.

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