LKT Laboratories, Inc.

Carbenoxolone

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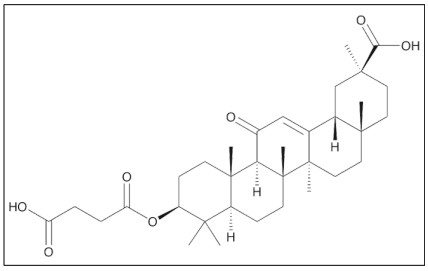
Product Information

Product ID C0167
CAS No. 5697-56-3
Chemical Name

Synonym

Formula $C_{34}H_{50}O_7$
Formula Wt. 570.76
Melting Point 292.8°C
Purity ≥97%
Solubility 100 mg/ 550 µL DMSO;
100 mg/ 3 mL Ethanol



Bulk quanitites available upon request

Product ID	Size
C0167	1 g
C0167	5 g
C0167	25 g

Store Temp Ambient
Ship Temp Ambient

Description Carbenoxolone is a synthetic derivative of the active component of licorice (*Glycyrrhiza glabra*) and is most well known for its ability to inhibit gap junction connexin channels and 11ß-hydroxysteroid dehydrogenase. Carbenoxolone displays a wide variety of beneficial properties, including neuroprotective, anti-inflammatory, and anti-obesity activities. In animal models, carbenoxolone decreases stroke infarction size and neuronal damage after middle cerebral artery occlusion and also delays the onset of experimental autoimmune encephalitis (EAE), potentially by decreasing production of IL-23 and Th17 cells. Carbenoxolone also prevents atrial inflammation and atrial fibrillation by inhibiting macrophage migration into atria. This compound exudes several benefits in obese mice, inhibiting expression of sterol regulatory element binding protein 1c (SREBP1C) and preventing development of fatty liver disease. In vitro, carbenoxolone inhibits expression of pro-inflammatory cytokines and apoptotic proteins; it also prevents fatty acid-induced expression of ROS and reverses fatty acid-induced mitochondrial membrane depolarization. In high-fed diet mice, this compound decreases expression of GLUT4, PPAR-γ, and other lipid-regulating genes, resulting in decreased body weight and visceral fat mass and increased sensitivity to insulin.

References

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