PRODUCT INFORMATION



Taraxasterol

Item No. 39245

CAS Registry No.: 1059-14-9

Formal Name: (3β,18α,19α)-urs-20(30)-en-3-ol

MF: $C_{30}H_{50}O$ FW: 426.7 **Purity:** ≥98% Supplied as: A solid -20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Taraxasterol is supplied as a solid. A stock solution may be made by dissolving the taraxasterol in the solvent of choice, which should be purged with an inert gas. Taraxasterol is soluble in chloroform.

Description

Taraxasterol is a pentacyclic triterpene that has been found in T. mongolicum and has diverse biological activities. 1-3 It decreases LPS-induced increases in the secreted levels of nitrite, prostaglandin E2 (PGE₂. Item No. 14010), TNF- α , IL-1 β , and IL-6 from RAW 264.7 macrophages when used at concentrations of 5 and 12.5 µg/ml. Taraxasterol reduces the levels of hepatitis B virus (HBV) surface antigen (HBsAg), HBV e antigen (HBeAg), and HBV DNA secreted from HBV-infected HepG2 2.2.15 hepatocytes in a concentration-dependent manner.² In vivo, taraxasterol (10 mg/kg per day) prevents increases in liver damage, hepatocyte apoptosis, serum levels of alanine transaminase (ALT) and aspartate aminotransferase (AST), and hepatic levels of malondialdehyde (MDA), as well as decreases in the hepatic levels of glutathione (GSH), superoxide dismutase (SOD), and Bax in a mouse model of liver injury induced by the plant lectin concanavalin A (Item No. 14951).3

References

- 1. Zhang, X., Xiong, H., and Liu, L. Effects of taraxasterol on inflammatory responses in lipopolysaccharide-induced RAW 264.7 macrophages. J. Ethnopharmacol. 141(1), 206-211 (2012).
- 2. Yang, Y., Ying, G., Wu, S., et al. In vitro inhibition effects of hepatitis B virus by dandelion and taraxasterol. Infect. Agent. Cancer 15, 44 (2020).
- 3. Sang, R., Yu, Y., Ge, B., et al. Taraxasterol from Taraxacum prevents concanavalin A-induced acute hepatic injury in mice via modulating TLRs/NF-kB and Bax/Bc1-2 signalling pathways. Artif. Cells Nanomed. Biotechnol. 47(1), 3929-3937 (2019).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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