

Product Data Sheet

Product Name: 11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester

Cat. No.: GF44560

Chemical Properties

Cas. No. 75911-16-9

Formula C₂₁H₃₀O₉

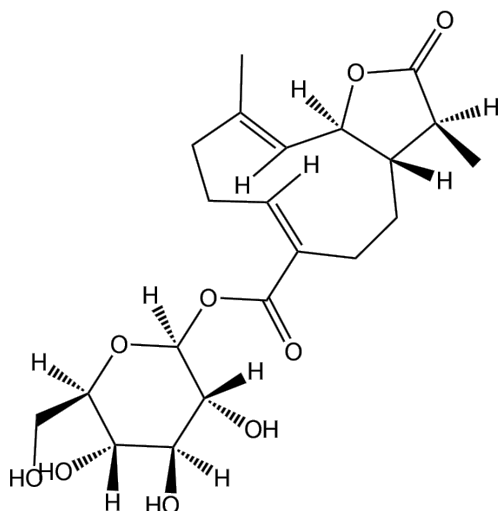
M.Wt 426.46

Solubility Storage Store at -20°C, protect from light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Protocol

Cell experiment [1]:

Cell lines Hepatitis B virus transfected Hep G2.2.15 cell line (human hepatoblastoma-derived cell line stably harboring HBV genome)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Hep G2.2.15 cells were cultured in RPMI-1640 medium supplemented with 1% antibiotics (streptomycin and penicillin) and 10% fetal bovine serum, and Preparation Method maintained in an incubator at 37°C, 5% CO₂. Hep G2.2.15 cells were treated with the 11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester at 0.91mM for 12 days.

Reaction
Conditions 0.91mM; 12 days

Applications 11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester inhibited the secretion of HBV surface antigen (HBsAg) and also suppressed the secretion of HBV e antigen (HBeAg).

References:

[1] Liu J, Zhang N, Liu M. A new inositol triester from *Taraxacum mongolicum*. Nat Prod Res. 2014;28(7):420-3.

Background

11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester is a eudesmane-type (germacranolide-derived) sesquiterpene lactone glucopyranosyl ester isolated from *Taraxacum officinale*, and 11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester exhibits relatively low cytotoxicity toward cells. 11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester can be used for natural product isolation and identification, phytochemical profiling, structure–activity relationship (SAR) control studies of sesquiterpene lactones, and method validation for the analysis of sesquiterpene lactone constituents in food and herbal matrices^[1-4].

In vitro, 11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester (0.91mM) was used to treat Hep G2.2.15 cells (a human hepatoblastoma cell line stably transfected with the hepatitis B virus (HBV) genome) for 12 days. 11 β ,13-Dihydrotaraxinic acid β -D-glucopyranosyl ester suppressed the

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

secretion of HBV surface antigen (HBsAg) and concurrently inhibited the secretion of HBV e antigen (HBeAg)^[5].

References:

- [1] Martinez M, Poirrier P, Chamy R, et al. Taraxacum officinale and related species-An ethnopharmacological review and its potential as a commercial medicinal plant. J Ethnopharmacol. 2015 Jul 1;169:244-62.
- [2] Fan M, Zhang X, Song H, et al. Dandelion (Taraxacum Genus): A Review of Chemical Constituents and Pharmacological Effects. Molecules. 2023 Jun 27;28(13):5022.
- [3] Laila U, Kaur J, Sharma K, et al. Dandelion (Taraxacum officinale): A Promising Source of Nutritional and Therapeutic Compounds. Recent Adv Food Nutr Agric. 2025;16(1):41-56.
- [4] Jeon HJ, Kang HJ, Jung HJ, et al. Anti-inflammatory activity of Taraxacum officinale. J Ethnopharmacol. 2008 Jan 4;115(1):82-8.
- [5] Liu J, Zhang N, Liu M. A new inositol triester from Taraxacum mongolicum. Nat Prod Res. 2014;28(7):420-3.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA