

Product Data Sheet

Product Name: Ganoderic acid Y

Cat. No.: GC62984

Chemical Properties

Cas. No. 86377-52-8

Formula $C_{30}H_{46}O_3$

M.Wt 454.68

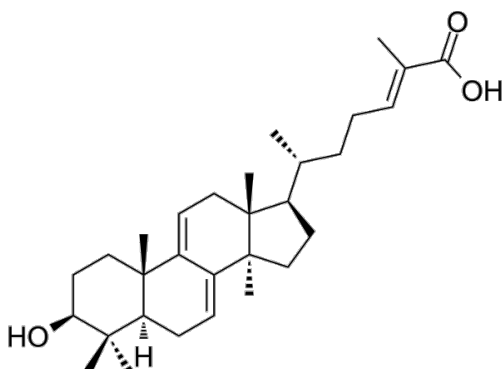
Solubility

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 Lung cancer cell line H460

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

The cell suspension of tumor cells was inoculated at a certain concentration into a 96-well culture plate and incubated in a 37°C, 5% CO₂ incubator for 24 hours.

Preparation Method The working solution of Ganoderic acid Y was added at a final concentration of 0.1, 1, 10, 100µM (4 duplicate wells for each concentration). After 72 hours of treatment, the culture medium was discarded, detect cell viability using the MTT method.

Reaction Conditions 0.1, 1, 10, 100µM; 72 hours

Applications Ganoderic acid Y inhibited cell viability of H460, with IC₅₀ of 22.4µM.

References:

[1]. Du, Guo-Hua, et al. "Anti-tumor target prediction and activity verification of Ganoderma lucidum triterpenoids." China Journal of Chinese Materia Medica 42.3 (2017): 517-522.

Background

Ganoderic acid Y is HMG-CoA Reductase inhibitor and α-glucosidase inhibitor with IC₅₀s of 8.6µM and 170µM, respectively [1,2]. Ganoderic acid Y can be used in cancer research.

In vitro, Ganoderic acid Y inhibited enterovirus 71 (EV71) replication through blocking EV71 uncoating[3]. Ganoderic acid Y inhibited the cell viabilities of K562 and PC-3 cell lines with IC₅₀s of 17.5 and 179.8µM [2]. Ganoderic acid Y inhibited cell viability of H460 in concentration-dependent manner, with IC₅₀ of 22.4µM [4].

References:

[1]. Chen, Xian-Qiang, et al. "Lanostane triterpenes from the mushroom Ganoderma resinaceum and their inhibitory activities against α-glucosidase." Phytochemistry 149 (2018): 103-115.

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

- [2]. Wang, Kai, et al. "Lanostane triterpenes from the Tibetan medicinal mushroom *Ganoderma leucocontextum* and their inhibitory effects on HMG-CoA reductase and α -glucosidase." *Journal of Natural Products* 78.8 (2015): 1977-1989.
- [3]. Zhang, Wenjing, et al. "Antiviral effects of two *Ganoderma lucidum* triterpenoids against enterovirus 71 infection." *Biochemical and biophysical research communications* 449.3 (2014): 307-312.
- [4]. Du, Guo-Hua, et al. "Anti-tumor target prediction and activity verification of *Ganoderma lucidum* triterpenoids." *China Journal of Chinese Materia Medica* 42.3 (2017): 517-522.

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