# PRODUCT INFORMATION



## **Geniposidic Acid**

Item No. 28409

CAS Registry No.: 27741-01-1

Formal Name: (1S,4aS,7aS)-1-(β-D-

> glucopyranosyloxy)-1,4a,5,7atetrahydro-7-(hydroxymethyl)-

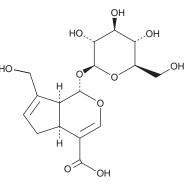
cyclopenta[c]pyran-4-carboxylic acid

MF:  $C_{16}H_{22}O_{10}$ FW: 374.3 ≥98% **Purity:** UV/Vis.:  $\lambda_{max}$ : 237 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Item Origin: Plant/Gardenia

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



#### **Laboratory Procedures**

Geniposidic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the geniposidic acid in the solvent of choice, which should be purged with an inert gas. Geniposidic acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of geniposidic acid in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of geniposidic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of geniposidic acid in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

Geniposidic acid is an iridoid glycoside that has been found in G. jasminoides and has diverse biological activities. 1-3 It inhibits ear edema induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) in mice by 91.01% when administered topically at a dose of 0.1 mg/ear. Geniposidic acid (50 mg/kg) increases survival rate, attenuates increases in alanine aminotransferase (ALT) activity and TNF-α levels in serum, as well as hepatic levels of malondialdehyde (MDA), and prevents decreases in hepatic GSH levels in a mouse model of fulminant hepatic failure induced by D-galactosamine (Item No. 22981) and LPS.<sup>2</sup> It decreases systolic blood pressure and heart rate and increases plasma levels of atrial natriuretic peptide (ANP; Item Nos. 24276 | 24539) in spontaneously hypertensive rats when administered at a dose of 100 mg/kg.3

#### References

- 1. Carrillo-Ocampo, D., Bazaldúa-Gómez, S., Bonilla-Barbosa, J.R., et al. Molecules 18(10), 12109-12118
- Kim, S.-J., Kim, K.-M., Park, J., et al. J. Ethnopharmacol. 146(1), 271-277 (2013).
- Nakamura, K., Hosoo, S., Yamaguchi, S., et al. J. Funct. Foods 40, 634-638 (2018).

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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### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM