

PRODUCT INFORMATION



Soyasaponin II

Item No. 40661

CAS Registry No.: 55319-36-3

Formal Name: (3 β ,4 β ,22 β)-22,23-dihydroxyolean-12-en-3-yl O-6-deoxy- α -L-mannopyranosyl-(1 $\rightarrow$ 2)-O- α -L-arabinopyranosyl-(1 $\rightarrow$ 2)- β -D-glucopyranosiduronic acid

Synonyms: Soyasaponin Bc, Soyasaponin BII

MF: C₄₇H₇₆O₁₇

FW: 913.1

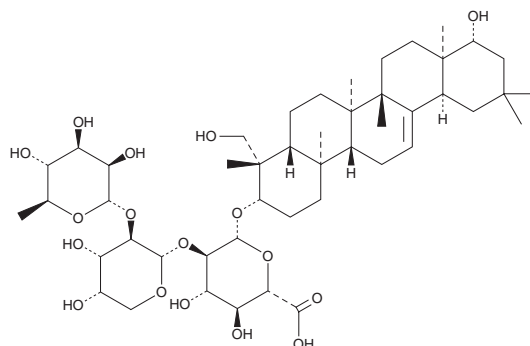
Purity: $\geq$ 98%

Supplied as: A solid

Storage: -20°C

Stability: $\geq$ 4 years

Item Origin: Plant/*Sophora moorcroftiana*



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

Laboratory Procedures

Soyasaponin II is supplied as a solid. A stock solution may be made by dissolving the soyasaponin II in the solvent of choice, which should be purged with an inert gas. Soyasaponin II is slightly soluble (0.1-1 mg/ml) in chloroform and methanol and sparingly soluble (1-10 mg/ml) in DMSO.

Soyasaponin II is sparingly soluble (1-10 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Soyasaponin II is a saponin that has been found in soybeans and has diverse biological activities.¹⁻³ It inhibits the proliferation of, and induces apoptosis in, HeLa cells when used at concentrations ranging from 100 to 400 mg/L.¹ It inhibits viral replication in cells infected with herpes simplex virus 1 (HSV-1), human cytomegalovirus (HCMV), or influenza virus (IC₅₀s = 54, 104, and 88 μ M, respectively).² *In vivo*, soyasaponin II (5 mg/kg) prevents the development of acute liver failure in a mouse model of LPS/D-galactosamine-induced acute liver injury.³

References

1. Xiao, J.-X., Huang, G.-Q., and Zhang, S.-H. Soyasaponins inhibit the proliferation of HeLa cells by inducing apoptosis. *Exp. Toxicol. Pathol.* **59**(1), 35-42 (2007).
2. Hayashi, K., Hayashi, H., Hiraoka, N., *et al.* Inhibitory activity of soyasaponin II on virus replication *in vitro*. *Planta Med.* **63**(2), 102-105 (1997).
3. Wang, F., Gong, S., Wang, T., *et al.* Soyasaponin II protects against acute liver failure through diminishing YB-1 phosphorylation and Nlrp3-inflammasome priming in mice. *Theranostics* **10**(6), 2714-2726 (2020).

WARNING

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

SAFETY DATA

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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