PRODUCT INFORMATION



Saikosaponin B₁

Item No. 34609

CAS Registry No.: 58558-08-0

Formal Name: (3β,4α,16β)-16,23,28-trihydroxyoleana-

> 11,13(18)-dien-3-yl 6-deoxy-3-O-β-Dglucopyranosyl-β-D-galactopyranoside

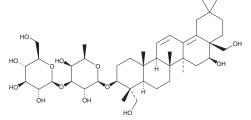
MF: $C_{42}H_{68}O_{13}$ 781.0 FW: ≥98% **Purity:**

UV/Vis.: λ_{max} : 243, 251, 261 nm

Supplied as: A solid Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Unspecified sp.

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



Laboratory Procedures

Saikosaponin B_1 is supplied as a solid. A stock solution may be made by dissolving the saikosaponin B_1 in the solvent of choice, which should be purged with an inert gas. Saikosaponin B_1 is soluble in DMSO.

Description

Saikosaponin B₁ is a triterpenoid saponin that has been found in B. chinense and has diverse biological activities. $^{1-3}$ It is an agonist of the serotonin (5-HT) receptor subtype 5-HT $_{2C}$ (EC $_{50}$ = 147.41 μ M in HEK293 cells expressing the human receptor in a calcium mobilization assay). 1 Saikosaponin B $_{1}$ (100 μ g/ml) stimulates prostaglandin E_2 (PGE₂; Item No. 14010) production in isolated rat peritoneal macrophages.² It protects SH-SY5Y cells from hydrogen peroxide-induced cell death when used at a concentration of 50 μg/ml.³

References

- 1. Sun, C.-L., Geng, C.-A., Huang, X.-Y., et al. Bioassay-guided isolation of saikosaponins with agonistic activity on 5-hydroxytryptamine 2C receptor from Bupleurum chinense and their potential use for the treatment of obesity. Chin. J. Nat. Med. 15(6), 467-473 (2017).
- Ohuchi, K., Watanabe, M., Ozeki, T., et al. Pharmacological influence of saikosaponins on prostaglandin E₂ production by peritoneal macrophages. Planta Med. 51(3), 208-212 (1985).
- 3. Zhang, Y., Liu, F., Zhang, X., et al. Recognition and identification of active components from Radix Bupleuri using human neuroblastoma SH-SY5Y cells. Biomed. Chromatogr. 30(3), 440-446 (2015).

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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