

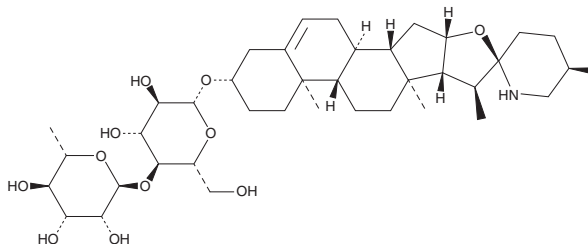
PRODUCT INFORMATION



Khasianine

Item No. 38762

CAS Registry No.: 32449-98-2
Formal Name: (3 β ,22 α ,25R)-spirosol-5-en-3-yl
4-O-(6-deoxy- α -L-mannopyranosyl)-
 β -D-glucopyranoside
Synonyms: NSC 376459, β 2-Solamargine
MF: C₃₉H₆₃NO₁₁
FW: 721.9
Purity: $\geq$ 98%
Supplied as: A solid
Storage: -20°C
Stability: $\geq$ 4 years
Item Origin: Synthetic



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

Laboratory Procedures

Khasianine is supplied as a solid. A stock solution may be made by dissolving the khasianine in the solvent of choice, which should be purged with an inert gas. Khasianine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of khasianine in ethanol is approximately 25 mg/ml and approximately 5 mg/ml in DMSO and DMF.

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 khasianine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of khasianine in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Khasianine is a steroidal glycoside that has been found in *S. nigrum* and has diverse biological activities.¹⁻³ It reduces the proliferation of LNCaP prostate and T47D breast cancer cells (IC₅₀s = 32.1 and 27.5 μ M, respectively). Khasianine (50 nM) inhibits TNF- α -induced nuclear translocation of NF- κ B in HaCaT keratinocytes.² It decreases the serum levels of amino transaminase (AST) in a mouse model of carbon tetrachloride-induced liver injury when administered at a dose of 0.1 mg/kg.³ Topical administration of khasianine (5 mg/kg) reduces ear epidermal thickness and scaling, as well as leukocyte and macrophage infiltration, in a mouse model of psoriasis induced by the TLR7 agonist imiquimod (Item No. 14956).²

References

1. Hu, K., Kobayashi, H., Dong, A., *et al.* Antineoplastic agents. III: Steroidal glycosides from *Solanum nigrum*. *Planta Med.* **65**(1), 35-38 (1999).
2. Yang, Y., Zhang, Y., Chen, X., *et al.* Khasianine ameliorates psoriasis-like skin inflammation and represses TNF- α /NF- κ B axis mediated transactivation of IL-17A and IL-33 in keratinocytes. *J. Ethnopharmacol.* **292**:115124, (2022).
3. Gan, K.H., Lin, C.N., and Won, S.J. Cytotoxic principles and their derivatives of Formosan *Solanum* plants. *J. Nat. Prod.* **56**(1), 15-21 (1993).

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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