

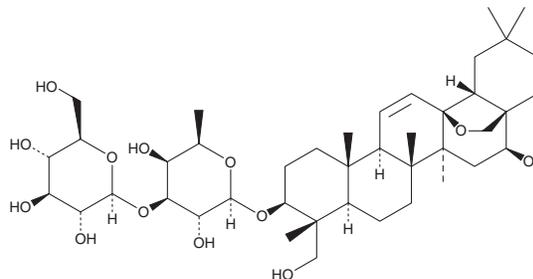
PRODUCT INFORMATION



Saikosaponin A

Item No. 25026

CAS Registry No.: 20736-09-8
Formal Name: (3 β ,4 α ,16 β)-13,28-epoxy-16,23-dihydroxyolean-11-en-3-yl 6-deoxy-3-O- β -D-glucopyranosyl- β -D-galactopyranoside
MF: C₄₂H₆₈O₁₃
FW: 781.0
Purity: \geq 98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

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

Saikosaponin A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, saikosaponin A should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Saikosaponin A has a solubility of approximately 0.1 mg/ml in a 1:9 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Saikosaponin A is a triterpenoid saponin with diverse biological activities, including anti-inflammatory, antiallergic, anticonvulsive, antiproliferative, and antiviral properties.¹⁻⁴ Saikosaponin A reduces expression of TNF- α , IL-6, and IL-1 β in primary mouse macrophages stimulated by LPS.⁵ It also increases the survival rate in mice with LPS-induced lethal endotoxemia in a dose-dependent manner.⁵ Saikosaponin A (20 mg/kg, i.v., per day) reduces weight loss, brain edema, blood-brain barrier disruption, and IL-6 and TNF- α protein levels in the ipsilateral cortex compared to control animals in a rat model of traumatic brain injury.⁶ It also reduces the number of nasal rubs and levels of serum TNF- α in an ovalbumin-sensitized allergic rhinitis mouse model *in vivo* when administered at a dose of 8 mg/kg.² It reduces the duration and frequency of epileptiform activity in rat hippocampal CA1 neurons in a dose-dependent manner in a 4-aminopyridine (4-AP; Item No. 18511) seizure model.³ Saikosaponin A (20 μ M) decreases viability in six human colon carcinoma (HCC), H358 lung and MCF-7 breast cancer, as well as Jurkat and K582 leukemia cell lines.⁷ It also prolongs tumor growth inhibition in LoVo and SW480 HCC mouse xenograft models *in vivo* when used at a dose of 2 mg/kg.

References

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3. Xie, W., Yu, Y.H., Du, Y.P., *et al.* *Evid. Based Complement. Alternat. Med.* **2013:413092** (2013).
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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.

WARRANTY AND LIMITATION OF REMEDY

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