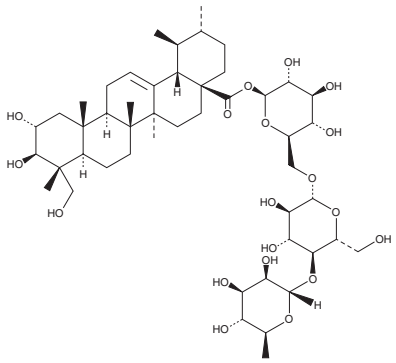
PRODUCT INFORMATION

Asiaticoside

Item No. 11819

CAS Registry No.:	16830-15-2
Formal Name:	2α,3β,23-trihydroxy-urs-12-en-28-oic acid, O-6-deoxy-α-L-mannopyranosyl-(1→4α)-O-β-D-glucopyranosyl-(1→6)-β-D-glucopyranosyl ester
Synonyms:	Ba 2742, NSC 36002, NSC 166062
MF:	$C_{48}H_{78}O_{19}$
FW:	959.1
Purity:	≥95%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Centella asiatica*



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

Laboratory Procedures

Asiaticoside is supplied as a crystalline solid. A stock solution may be made by dissolving the asiaticoside in the solvent of choice, which should be purged with an inert gas. Asiaticoside is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of asiaticoside in these solvents is approximately 5, 10, and 25 mg/ml, respectively.

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 asiaticoside can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of asiaticoside in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Asiaticoside is the main saponin constituent of *C. asiatica*, a plant long used in the Ayurvedic system of medicine to treat a variety of ailments including dermatitis, diabetes, cough, cataract, hypertension, as well as for wound healing and improving memory. In various wound healing models, topical application (0.2-0.4%), injection (1 mg), or ingestion (1 mg/kg) of asiaticoside has been shown to increase hydroxyproline content, improve tensile strength, increase collagen synthesis and remodeling of the collagen matrix, promote epithelialization, stimulate glycosaminoglycan synthesis, and elevate antioxidant levels.[1-4]

References

1. Somboonwong, J., Kankaisre, M., Tantisira, B., *et al.* Wound healing activities of different extracts of *Centella asiatica* in incision and burn wound models: An experimental animal study. *BMC Complement. Altern. Med.* **12(103)**, (2012).
2. Maquart, F.X., Chastang, F., Simeon, A., *et al.* Triterpenes from Centella asiatica stimulate extracellular matrix accumulation in rat experimental wounds. *Eur. J. Dermatol.* **9(4)**, 289-296 (1999).
3. Rasik, A.M. and Shukla, A. Antioxidant status in delayed healing type of wounds. *Int. J. Exp. Pathol.* **81(4)**, 257-263 (2000).
4. Shukla, A., Rasik, A.M., Jain, G.K., *et al.* In vitro and in vivo wound healing activity of asiaticoside isolated from *Centella asiatica*. *J. Ethnopharmacol.* **65(1)**, 1-11 (1999).

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