PRODUCT INFORMATION



Escin Ib

Item No. 33926

CAS Registry No.: 26339-90-2

Formal Name: $(3\beta,4\beta,16\alpha,21\beta,22\alpha)-22-(acetyloxy)-$

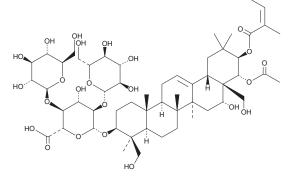
> 16,23,28-trihydroxy-21-[[(2Z)-2methyl-1-oxo-2-buten-1-yl]oxy]olean-12-en-3-yl O-β-D-glucopyranosyl- $(1\rightarrow 2)$ -O-[β -D-glucopyranosyl- $(1\rightarrow 4)$]-

β-D-glucopyranosiduronic acid

Synonym: Aescin B $C_{55}H_{86}O_{24}$ MF: FW: 1,131.3 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥2 years

Item Origin: Plant/Aesculus chinensis seeds

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



Laboratory Procedures

Escin Ib is supplied as a solid. A stock solution may be made by dissolving the escin Ib in the solvent of choice, which should be purged with an inert gas. Escin Ib is soluble in the organic solvent methanol.

Description

Escin Ib is a triterpene saponin that has been found in A. hippocastanum and has diverse biological activities. $^{1-4}$ It inhibits HIV-1 protease (IC $_{50}$ = 50 μ M). 1 Escin Ib (50-200 mg/kg) inhibits carrageenan-induced paw edema in rats and scratching behavior induced by compound 48/80 (Item No. 22173) in mice.² It inhibits ethanol absorption and increases glucose tolerance in rats.³ Escin 1b (10-50 mg/kg) also decreases mucosal lesion size and severity in a rat model of ethanol-induced gastric ulcers.4

References

- 1. Yang, X.-W., Zhao, J., Cui, Y.-X., et al. Anti-HIV-1 protease triterpenoid saponins from the seeds of Aesculus chinensis. J. Nat. Prod. 62(11), 1510-1513 (1999).
- 2. Matsuda, H., Li, Y., Murakami, T., et al. Effects of escins Ia, Ib, IIa, and IIb from horse chestnut, the seeds of Aesculus hippocastanum L., on acute inflammation in animals. Biol. Pharm. Bull. 20(10), 1092-1095 (1997).
- 3. Yoshikawa, M., Harada, E., Murakami, T., et al. Escins-la, lb, lla, llb, and Illa, bioactive triterpene oligoglycosides from the seeds of Aesculus hippocastanum L.: Their inhibitory effects on ethanol absorption and hypoglycemic activity on glucose tolerance test. Chem. Pharm. Bull. (Tokyo) 42(6), 1357-1359 (1994).
- 4. Matsuda, H., Li, Y., and Yoshikawa, M. Gastroprotections of escins Ia, Ib, IIa, and IIb on ethanol-induced gastric mucosal lesions in rats. Eur. J. Pharmacol. 373(1), 63-70 (1999).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM