

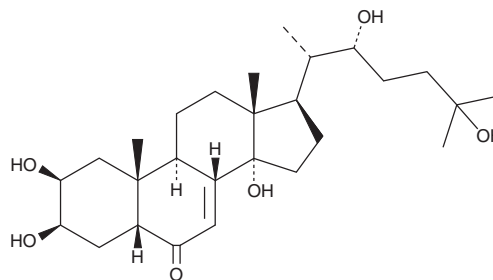
PRODUCT INFORMATION



α -Ecdysone

Item No. 11711

CAS Registry No.: 3604-87-3
Formal Name: (5 β)-2 β ,3 β ,14,22R,25-pentahydroxy-cholest-7-en-6-one
MF: C₂₇H₄₄O₆
FW: 464.6
Purity: \geq 95%
UV/Vis.: λ_{max} : 242 nm
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

α -Ecdysone is supplied as a crystalline solid. A stock solution may be made by dissolving the α -ecdysone in the solvent of choice, which should be purged with an inert gas. α -Ecdysone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of α -ecdysone in these solvents is approximately 20, 0.1, and 1 mg/ml, respectively.

α -Ecdysone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, α -ecdysone should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. α -Ecdysone has a solubility of approximately 0.1 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

α -Ecdysone is a prohormone of 20-hydroxy ecdysone (Item No. 16145), an insect-molting, ecdysteroid hormone.¹ The insect neurohormone, prothoracicotropic hormone, stimulates prothoracic glands to release α -ecdysone, which is then rapidly converted to its active metabolite, 20-hydroxy ecdysone.^{2,3}

References

1. Fallon, A.M. and Gerenday, A. Ecdysone and the cell cycle: Investigations in a mosquito cell line. *J. Insect Physiol.* **56(10)**, 1396-1401 (2010).
2. Carrow, G.M., Calabrese, R.L., and Williams, C.M. Spontaneous and evoked release of prothoracicotropin from multiple neurohemal organs of the tobacco hornworm. *Proc. Natl. Acad. Sci. USA* **78(9)**, 5866-5870 (1981).
3. Cherbas, L. and Cherbas, P. Distribution and metabolism of α -ecdysone in pupae of the silkworm *Antheraea polyphemus*. *Biol. Bull.* **138(2)**, 115-128 (1970).

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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