

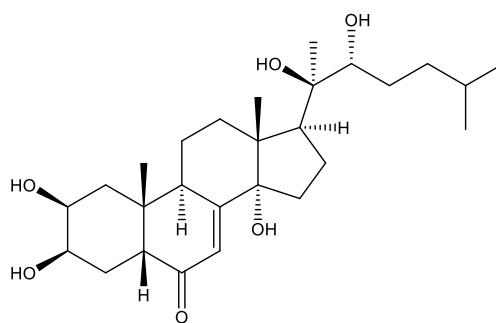
Catalog # 10-1404

Ponasterone A

13408-56-5

25-Deoxy-2-hydroxyecdysone; 25-deoxyecdysterone; (5 β)-2 β ,3 β ,14,20,22R-pentahydroxy-cholest-7-en-6-one

Lot # X105502



Ponasterone A is a potent ecdysone agonist which elicits molting and metamorphosis in insects.¹ Ponasterone A and related ecdysteroids have been used as activators in ecdysone-inducible mammalian expression systems.^{2,3} Has been used to create an inducible cell model for Huntingdon's disease.⁴ Ecdysone analogs have been shown to display a strong antiapoptotic effect in mammalian cell lines thus ecdysone-based expression systems may not be suitable for analysis of apoptosis-related genes.⁵

- 1) Gonsalves *et al.* (2011), *Genome-wide examination of the transcriptional response to ecdysteroids 20-hydroxyecdysone and ponasterone A in Drosophila melanogaster*, BMC Genomics **12** 475
- 2) Lafont and Dinan (2003), *Practical uses for ecdysterones in mammals including humans: an update*; J. Insect Sci. **3** 7
- 3) Saez *et al.* (2000), *Identification of ligands and coligands for the ecdysone-regulated gene switch*; Proc Nat. Acad. Sci. USA **97** 14512
- 4) Chen *et al.* (2018), *Heat shock promotes inclusion body formation of mutant huntingtin (mHtt) and alleviates mHtt-induced transcription factor dysfunction*; J. Biol. Sci. **293** 15581
- 5) Oehme *et al.* (2006), *Agonists of an ecdysone-inducible mammalian expression system inhibit Fas Ligand- and TRAIL-induced apoptosis in the human colon carcinoma cell line RKO*; Cell Death Differ. **13** 189

PHYSICAL DATA

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|------------------------|---|
| Molecular Weight: | 464.64 |
| Molecular Formula: | C ₂₇ H ₄₄ O ₆ |
| Purity: | >97% by HPLC/TLC |
| | NMR: (Conforms) |
| Solubility: | DMSO (30 mg/ml); Ethanol (5 mg/ml with warming) |
| Physical Description: | White solid |
| Storage and Stability: | Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months. |

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