Ponasterone A and Muristerone A

Contents and Storage

This manual is supplied with Ponasterone A and Muristerone A. Both reagents are shipped at room temperature. Upon receipt, store as detailed below.

Reagent	Catalog no.	Amount	Storage
Ponasterone A	H101-01	1 mg (4 x 250 μg), lyophilized	-20°C
	H101-03	100 mg (1 tube), lyophilized	
Muristerone A	H100-01	1 mg (4 x 250 μg), lyophilized	-20°C

Description

Ponasterone A and muristerone A are polyhydroxylated steroids with strong molting hormone activity in insects. Ponasterone A was first isolated from the *plant Podocarpus nakaii* (Nakanishi *et al.*, 1966) and was subsequently shown to induce molting in houseflies and silkworms (Kobayashi et al., 1967). For a review of ponasterone, see Nakanishi, 1992. For more information on muristerone, see Christopherson, 1992.

Molecular Weight, Formula, and Structure

MW: 464.65 Formula: C₂₇H₄₄O₆ MW: 496.6 Formula: C₂₇H₄₄O₈

Ponasterone A

Muristerone A

Preparing and Storing Stock Solutions

Ponasterone A and muristerone A are soluble in 100% ethanol. To prepare an \sim 1 mM stock solution (1.1 mM):

- Add 500 μ l of 100% ethanol to one vial of ponasterone A or muristerone A (250 μ g, ~0.5 μ mole)
- · Vortex to dissolve
- Do not heat solution to dissolve ponasterone A or muristerone A
- Store the 1 mM stock solution at +4° or at -20°C for long-term storage.

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References

- Christopherson, K., Mark, M., Bajaj, V., and Godowski, P. (1992). Ecdysteroid-Dependent Regulation of Genes in Mammalian Cells by a *Drosophila* Ecdysone Receptor and Chimeric Transactivators. Proc. Natl. Acad. Sci. USA 89, 6314-6318.
- Kobayashi, M., Nakanishi, K., and Koreeda, M. (1967). The Moulting Hormone Activity of Ponasterones on Musca domestica (Diptera) and Bombyx mori (Lepidoptera). Steroids *9*, 529-536.
- Masuoka, M., Orita, S., Shino, A., Matsuzawa, T., and Nakayama, R. (1970). Pharmacological Studies of Insect Metamorphosing Hormone: Ponasterone A, Ecdysterone, and Inokosterone, in the Rat. Jap. J. Pharmac. 20, 142-156.
- Nakanishi, K. (1992). Past and Present Studies with Ponasterones, the First Insect Molting Hormones from Plants. Steroids *57*, 649-657.
- Nakanishi, K., Koreeda, M., Sasaki, S., Chang, M. L., and Hsu, H. Y. (1966). Insect Hormones. The Structure of Ponasterone A, an Insect-Moulting Hormone from the Leaves of *Podocarpus nakaii* hay. Chem. Commun., 915-917.

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