

PRODUCT DATA SHEET

Code No.: BIA-E2366

Pack sizes: 1 mg, 5 mg

Elsinochrome A

Synonyms : NSC 623609

Specifications

CAS # : 24568-67-0 Molecular Formula : $C_{30}H_{24}O_{10}$ Molecular Weight : 544.51

Source : Aspergillus sp.

Appearance : Red solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in methanol or DMSO

Application Notes

Elsinochrome A is a red photosensitive pigment produced by Aspergillus sp. and other fungi, including the bindweed biocontrol fungus Stagonospora convolvuli LA39 an important virulence factor for peanut scab. Elsinochrome A is effective against pine wood nematodes at 15 μ g/mL, with effectiveness enhanced by infrared irradiation. Photoactivated elsinochrome A induces apoptosis in human colorectal carcinoma Hce-8693 at 10-5 – 10-6 M.

References

- 1. Elsinochrome A production by the bindweed biocontrol fungus Stagonospora convolvuli LA39 does not pose a risk to the environment or the consumer of treated crops. Boss D. et al. FEMS Microbiol Ecol. 2007, 59, 194.
- 2. Elsinochrome phytotoxin production and pathogenicity of Elsinoë arachidis isolates in China. Jiao W-L. et al. PLoS One 2019, 14:e0218391.
- 3. Nematicidal activity of perylenequinones photosensitive compounds. Dong J. et al. Junwu Xitong 2001, 20, 515.
- 4. Photodynamic inhibitory effects of three perylenequinones on human colorectal carcinoma cell line and primate embryonic stem cell line. Lan M. et al. World J Gastroenterol. 2003, 9, 485.
- 5. DNA binding and photo-induced DNA cleavage activity of Elsinochrome A in visible light. Ma F. et al. Spectroscopy 2011, 26, 289.

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