

Product Data Sheet

Product Name: Metalaxyl

Cat. No.: GC47632

Chemical Properties

Cas. No. 57837-19-1

SMILES CC1=CC=CC(C)=C1N(C(COC)=O)C(C(OC)=O)C

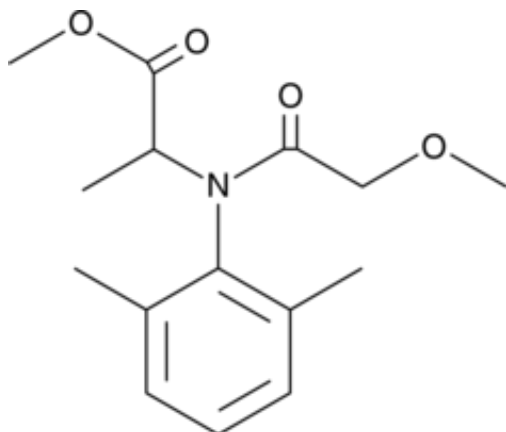
Formula C₁₅H₂₁NO₄ M.Wt 279.3

Solubility DMSO : 100 mg/mL (358.00 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Metalaxyl is a fungicide that inhibits protein synthesis in fungi.^{1,2} It inhibits the growth of potato blight (*P. infestans*) fungal isolates from Serbian potato fields (EC₅₀s = 0.3-3.9 µg/ml).¹ Metalaxyl (300 and 1,000 µg/ml) induces formation of chromosomal aberrations in human lymphocytes.³ It exhibits aquatic toxicity against *S. quadricanda*, *D. magna*, and *D. rerio* (IC₅₀s = 222.89, 471.95, and 241.98 mg/L, respectively).⁴ Metalaxyl also induces tremors, twitches, tonic extension, ataxia, and hypnosis, symptoms of CNS poisoning, and lethality in rats (LD₅₀s = 265 and 288.8 mg/kg for female and male

Caution: Product has not been fully validated for medical applications. For research use only.

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rats, respectively).²

1.Rekanovi?, E., Poto?nik, I., Milijaševi?-Mar?i?, S., et al.Toxicity of metalaxyl, azoxystrobin, dimethomorph, cymoxanil, zoxamide and mancozeb to Phytophthora infestans isolates from SerbiaJ. Environ. Sci. Health B.47(5)403-409(2012) 2.Naidu, K.A., and Radhakrishnamurty, R.Metalaxyl-induced bradycardia in rats: Mediated by α -adrenoreceptorsJ. Toxicol. Environ. Health23(4)495-498(1988) 3.Hrelia, P., Maffei, F., Fimognari, C., et al.Cytogenetic effects of metalaxyl on human and animal chromosomesMutat. Res.369(1-2)81-86(1996) 4.Yao, K., Zhu, L., Duan, Z., et al.Comparison of R-metalaxyl and rac-metalaxyl in acute, chronic, and sublethal effect on aquatic organisms: Daphnia magna, Scenedesmus quadricanda, and Danio rerioEnviron. Toxicol.24(2)148-156(2009)

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