

Product Data Sheet

Product Name: (-)-Cryptopleurine

Cat. No.: GC48635

Chemical Properties

Cas. No. 482-22-4

SMILES COC1=CC2=C3C(CN4[C@@](CCCC4)([H])C3)=C5C(C=C(C=C5)OC)=C2C=C1OC

Formula C₂₄H₂₇NO₃

M.Wt 377.5

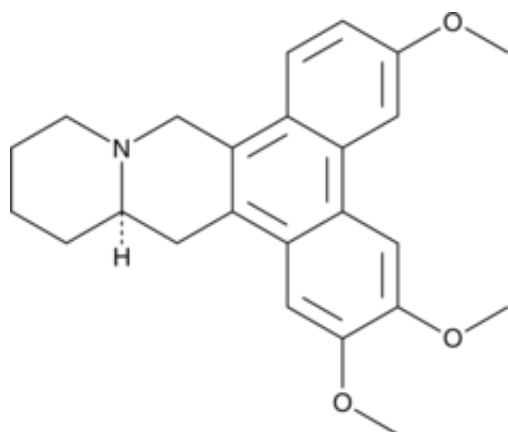
Solubility

Storage -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

(-)-Cryptopleurine is an alkaloid that has been found in *Lauraceae* and has diverse biological activities.¹ It inhibits the growth of human A375 melanoma, A431 epidermoid carcinoma, A549 lung, MES-SA uterine sarcoma, and MCF-7 breast cancer cells (IC₅₀ = 3 nM for all).² (-)-Cryptopleurine inhibits hypoxia-induced gene expression in a hypoxia response element (HRE) reporter assay (IC₅₀ = 8.7 nM).³ (-)-Cryptopleurine (500 µg/ml) prevents lesion formation in tobacco (*N. tabacum*) plants infected with tobacco mosaic virus (TMV).¹ It also inhibits protein synthesis by yeast and mammalian ribosomes.^{4,5}

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

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1.Wang, Z., Feng, A., Cui, M., et al.First discovery and stucture-activity relationship study of phenanthroquinolizidines as novel antiviral agents against Tobacco Mosaic Virus (TMV)PLoS One7(12)e52933(2012) 2.Banwell, M.G., Bezos, A., Burns, C., et al.C8c-C15 monoseco-analogues of the phenanthroquinolizidine alkaloids julandine and cryptopleurine exhibiting potent anti-angiogenic propertiesBioorg. Med. Chem. Lett.16(1)181-185(2006) 3.Cai, X.F., Jin, X., Lee, D., et al.Phenanthroquinolizidine alkaloids from the roots of Boehmeria pannosa potently inhibit hypoxia-inducible factor-1 in AGS human gastric cancer cellsJ. Nat. Prod.69(7)1095-1097(2006) 4.Battaner, E., and Vazquez, D.Inhibitors of protein synthesis by ribosomes of the 80-S typeBiochim. Biophys. Acta254(2)316-330(1971) 5.Pestka, S., Rosenfeld, H., Harris, R., et al.Studies on transfer ribonucleic acid-ribosome complexes. XXI. Effect of antibiotics on peptidyl-puromycin synthesis by mammalian polyribosomesJ. Biol. Chem.247(21)6895-6900(1972)

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