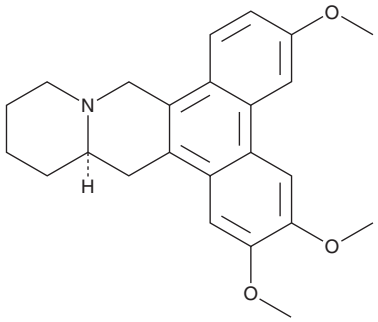
PRODUCT INFORMATION

(–)-Cryptopleurine

Item No. 31642

CAS Registry No.:	482-22-4
Formal Name:	11,12,13,14,14aR,15-hexahydro-2,3,6-trimethoxy-9H-phenanthro[9,10-b]quinolizine
Synonyms:	(R)-Cryptopleurine, NSC 19912
MF:	$C_{24}H_{27}NO_3$
FW:	377.5
Purity:	≥95%
UV/Vis.:	λ_{max}: 260, 287 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Cryptocarya pleurosperma*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

(–)-Cryptopleurine is supplied as a solid. A stock solution may be made by dissolving the (–)-cryptopleurine in the solvent of choice, which should be purged with an inert gas. (–)-Cryptopleurine is soluble in organic solvents such as methanol and DMSO.

Description

(–)-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 (IC_{50} = 3 nM for all).[2] (–)-Cryptopleurine inhibits hypoxia-induced gene expression in a hypoxia response element (HRE) reporter assay (IC_{50} = 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]

References

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 One* **7(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 properties. *Bioorg. 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 cells. *J. Nat. Prod.* **69(7)**, 1095-1097 (2006).
4. Battaner, E. and Vazquez, D. Inhibitors of protein synthesis by ribosomes of the 80-S type. *Biochim. Biophys. Acta* **254(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 polyribosomes. *J. Biol. Chem.* **247(21)**, 6895-6900 (1972).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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