

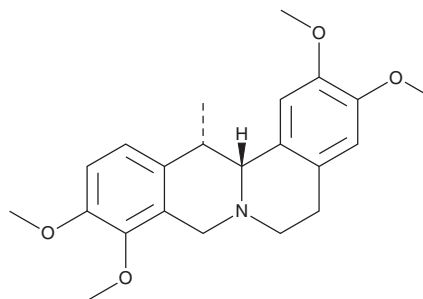
# PRODUCT INFORMATION



## Corydaline

Item No. 27654

**CAS Registry No.:** 518-69-4  
**Formal Name:** 5,8,13S,13aR-tetrahydro-2,3,9,10-tetramethoxy-13-methyl-6H-dibenzo[a,g]quinolizine  
**Synonyms:** (+)-Corydaline, D-Corydaline, NSC 406036  
**MF:** C<sub>22</sub>H<sub>27</sub>NO<sub>4</sub>  
**FW:** 369.5  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years  
**Item Origin:** Plant/*Corydalis yanhusuo*



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

### Laboratory Procedures

Corydaline is supplied as a solid. A stock solution may be made by dissolving the corydaline in the solvent of choice, which should be purged with an inert gas. Corydaline is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of corydaline in these solvents is approximately 5 mg/ml.

Corydaline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, corydaline should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Corydaline has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Corydaline is an alkaloid that has been found in *C. cava* and has diverse biological activities.<sup>1-4</sup> It inhibits acetylcholinesterase (AChE; IC<sub>50</sub> = 15 μM).<sup>1</sup> Corydaline is nematocidal against *S. ratti* and *S. venezuelensis* third instar larvae with 50% paralysis (PC<sub>50</sub>) values of 18 and 30 μM, respectively.<sup>2</sup> It inhibits thrombin-induced platelet aggregation *in vitro* (IC<sub>50</sub> = 54.16 μg/ml).<sup>3</sup> Corydaline (1 and 3 mg/kg) increases gastric emptying in rat models of apomorphine- and laparotomy-induced delayed gastric emptying.<sup>4</sup>

### References

1. Adersen, A., Kjølbye, A., Dall, O., *et al.* Acetylcholinesterase and butyrylcholinesterase inhibitory compounds from *Corydalis cava* Schweigg. & Kort. *J. Ethnopharmacol.* **113**(1), 179-182 (2007).
2. Satou, T., Koga, M., Matsushashi, R., *et al.* Assay of nematocidal activity of isoquinoline alkaloids using third-stage larvae of *Strongyloides ratti* and *S. venezuelensis*. *Vet. Parasitol.* **104**(2), 131-138 (2002).
3. Zhang, Q., Chen, C., Wang, F.-Q., *et al.* Simultaneous screening and analysis of antiplatelet aggregation active alkaloids from *Rhizoma Corydalis*. *Pharm. Biol.* **54**(12), 3113-3120 (2016).
4. Lee, T.H., Son, M., and Kim, S.Y. Effects of corydaline from *Corydalis tuber* on gastric motor function in an animal model. *Biol. Pharm. Bull.* **33**(6), 958-962 (2010).

#### 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.

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