



Product Information

Product ID C5863

CAS No. 6020-18-4

Chemical Name

Synonym

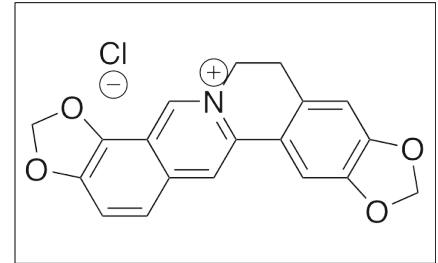
Formula C₁₉H₁₄ClNO₄

Formula Wt. 355.77

Melting Point

Purity ≥98%

Solubility DMSO:10mg/mL



Bulk quantities available upon request

Product ID	Size
C5863	1 mg
C5863	5 mg

Store Temp 4° C

Ship Temp Ambient

Description

Coptisine is an isoquinoline alkaloid originally found in a variety of sources, including species of *Fumaria* and *Papavera*. Coptisine exhibits a wide variety of beneficial properties, including cardioprotective, anti-inflammatory, neuromodulatory, antibacterial, and anticancer activities. Coptisine attenuates mitochondrial respiratory dysfunction, inhibits expression of RhoA and/or Rho-associated kinase (ROCK), and decreases myocardial apoptosis. Coptisine also inhibits proliferation of vascular smooth muscle cells, potentially through upregulation of Gadd45a and Rgc32 genes. Coptisine induces cell cycle arrest in vascular smooth muscle cells as well, decreasing levels of cyclin D1 and potentially inhibiting microtubule polymerization. In heart tissue, this compound inhibits expression of IL-6, TNF- α , and IL-1 β , displaying cardioprotective benefit in animal models of ischemia/reperfusion. Coptisine inhibits proliferation in cancer cell lines. This compound also inhibits monoamine oxidase A (MAO-A) and exhibits antibiotic activity against gram negative bacteria *Escherischia coli*.

References

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- Ro JS, Lee SS, Lee KS, et al. Inhibition of type A monoamine oxidase by coptisine in mouse brain. *Life Sci*. 2001 Dec 28;70

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.