

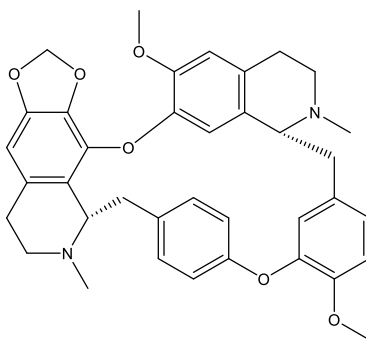
**Catalog # 10-5074**

**Cepharanthine**

CAS# 481-49-2

O-Methylcepharanoline; NSC623442

Lot # X109372



A naturally occurring alkaloid from *Stephania cepharantha* Hayata which possesses a number of pharmacological activities.<sup>1</sup> Attenuates LPS-induced expression of TNF- $\alpha$ , IL-6 and IL-1 $\beta$  in macrophages and inhibits NF- $\kappa$ B activation.<sup>2</sup> Induces mitophagy possibly by acting at GPR30 in hepatocellular carcinoma.<sup>3</sup> Inhibits autophagosome-lysosome fusion and autophagy by downregulation of MYO1C an actin-based motor protein.<sup>4</sup> Potently inhibits replication of SARS CoV-2 and homologous viruses.<sup>5</sup>

- 1) Rogosnitzky and Dank (2011), *Therapeutic potential of the biscochlorine alkaloid, cepharanthine, for a range of clinical conditions*; Pharmacol. Rep., **63** 337
- 2) Huang *et al.* (2014), *Cepharanthine, an alkaloid from Stephania cepharantha Hayata inhibits the inflammatory response in the RAW264.7 cell and mouse models*; Inflammation, **37** 235
- 3) Wang *et al.* (2020), *Cepharanthine hydrochloride induces mitophagy targeting GPR30 in hepatocellular carcinoma (HCC)*; Expert Opin. Ther. Targets, **24** 389
- 4) Zhang *et al.* (2019), *Downregulation of MYO1C mediated by cepharanthine inhibits autophagosome-lysosome fusion through blockade of the F-actin network*; J. Exp. Clin. Cancer Res. **38** 457
- 5) Rosognitzky *et al.* (2020), *Cepharanthine: a review of the antiviral potential of a Japanese-approved alopecia drug in COVID-19*; Pharmacol. Rep., **72** 1509

**PHYSICAL DATA**

Molecular Weight:	606.71
Molecular Formula:	C <sub>37</sub> H <sub>38</sub> N <sub>2</sub> O <sub>6</sub>
Purity:	95% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 35 mg/ml) or Ethanol (up to 20 mg/ml)
Physical Description:	Pale-yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

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