# Dehydroevodiamine

**Cat. No.:** HY-N2106

**CAS No.:** 67909-49-3

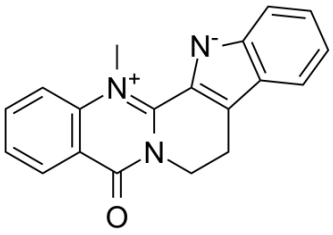
**Molecular Formula:** $C_{19}H_{15}N_3O$

**Molecular Weight:** 301.34

**Target:** NF-κB; COX; PGE synthase; NO Synthase

**Pathway:** NF-κB; Immunology/Inflammation

**Storage:** Please store the product under the recommended conditions in the Certificate of Analysis.



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 8.33 mg/mL (27.64 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 3.3185 mL | 16.5926 mL | 33.1851 mL |
| | 5 mM | 0.6637 mL | 3.3185 mL | 6.6370 mL |
| | 10 mM | 0.3319 mL | 1.6593 mL | 3.3185 mL |

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

**Description**

Dehydroevodiamine is a major bioactive quinazoline alkaloid isolated from Evodiae Fructus, has an antiarrhythmic effect in guinea-pig ventricular myocytes[1]. Dehydroevodiamine inhibits LPS-induced iNOS, COX-2, prostaglandin E2 (PGE2) and nuclear factor-kappa B (NF-κB) expression in murine macrophage cells[2].

**$IC_{50}$ & Target**

iNOS; COX-2; PGE2; NF-κB[2]

**In Vitro**

Dehydroevodiamine (0-50 μM; 2 hours) inhibits iNOS and COX-2 expression and prevents degradation of IκB-α in LPS induced RAW 264.7 macrophages[2].

Dehydroevodiamine (0-50 μM; 2 hours) inhibits a LPS-induced increase in the iNOS and COX-2 mRNA expression[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[2]

| | |
|---|---|
| Cell Line: | RAW 264.7 macrophage cells |
| Concentration: | 10 μM, 30 μM, 50 μM |
| Incubation Time: | pretreated 2 hours |

| | |
|---|---|
| Result: | Reduced iNOS and COX-2 expression and increased IκB-α expression. |

RT-PCR[2]

| | |
|---|---|
| Cell Line: | RAW 264.7 macrophage cells |
| Concentration: | 10 μM, 30 μM, 50 μM |
| Incubation Time: | pretreated 2 hours |
| Result: | Reduced iNOS and COX-2 mRNA expression. |

## REFERENCES


[1]. Loh SH, et al. Antiarrhythmic effects of dehydroevodiamine in isolated human myocardium and cardiomyocytes. J Ethnopharmacol. 2014 May 14;153(3):753-62.

[2]. Noh EJ, et al. Inhibition of lipopolysaccharide-induced iNOS and COX-2 expression by dehydroevodiamine through suppression of NF-kappaB activation in RAW 264.7 macrophages. Life Sci. 2006 Jul 10;79(7):695-701. Epub 2006 Mar 6.





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