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**Product Data Sheet**


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Product Name: Skimmianine

Cat. No.: GC39014

**Chemical Properties**

Cas. No. 83-95-4

SMILES COC1=C2N=C(OC=C3)C3=C(OC)C2=CC=C1OCFormula  $C_{14}H_{13}NO_4$ 

M.Wt 259.26

Solubility DMSO : 33.33 mg/mL (128.56 mM; ultrasonic and warming and heat to 60°C)

Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Skimmianine is a furoquinoline alkaloid that has been found in *Z. nitidum* and has diverse biological activities.<sup>1,2,3,4</sup> It inhibits acetylcholinesterase (AChE;  $IC_{50} = 8.6$  ?g/ml for the human enzyme).<sup>1</sup> Skimmianine is active against *P. falciparum* ( $IC_{50} = 48.2$  ?g/ml), as well as *L. gongylophorus*, a symbiotic fungus of the agricultural pest *A. sexdens* (leaf-cutting ant).<sup>2,3</sup> It reduces ear edema induced by phorbol 12-myristate 13-acetate in mice ( $ED_{45} = 0.75$  mg/ear).<sup>4</sup>

1. Yang, Z.-d., Zhang, D.-b., Ren, J., et al. Skimmianine, a furoquinoline alkaloid from *Zanthoxylum nitidum* as a potential acetylcholinesterase inhibitor. *Med. Chem. Res.* 21:722-725(2011) 2. Khalid, S.A., Farouk, A., Geary, T.G., et al. Potential antimalarial candidates from African plants: An in vitro approach using *Plasmodium falciparum*. *J. Ethnopharmacol.* 15(2):201-209(1986) 3. Biavatti, M.W., Vieira, P.C., da Silva, F.d.G.F., et al. Biological activity of quinoline alkaloids from *Raulinoa echinata* and x-ray structure of flindersiamine. *Braz. Chem. Soc.* 13(1):66-70(2002) 4. García-Argáez, A.N., Ramírez Apan,

**Caution: Product has not been fully validated for medical applications. For research use only.**

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T.O., Parra Delgado, H., et al. Anti-inflammatory activity of coumarins from Decatropis bicolor on TPA ear mice model *Planta Med.* 66(3)279-281(2000)

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