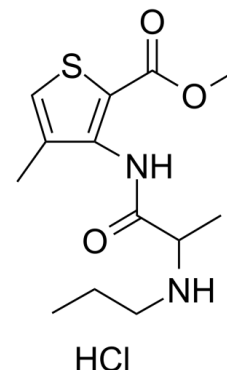


Data Sheet

Product Name:	Articaine (hydrochloride)
Cat. No.:	CS-2728
CAS No.:	23964-57-0
Molecular Formula:	C ₁₃ H ₂₁ ClN ₂ O ₃ S
Molecular Weight:	320.84
Target:	NF-κB; NOD-like Receptor (NLR); Sodium Channel
Pathway:	Immunology/Inflammation; Membrane Transporter/Ion Channel; NF-κB
Solubility:	DMSO : 100 mg/mL (311.68 mM; Need ultrasonic); H ₂ O : 100 mg/mL (311.68 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Articaine hydrochloride (Hoe-045) is an amide anaesthetic containing an ester group, reversibly binding to the α-subunit of the voltage-gated sodium channels within the inner cavity of the nerve, can provide effective pain relief. Articaine hydrochloride ameliorates LPS-induced acute kidney injury via inhibition of NF-κB activation and the NLRP3 inflammasome pathway^{[1][2][3]}.

References:

- [1]. Yapp KE, et al. Articaine: a review of the literature. Br Dent J. 2011 Apr 9;210(7):323-9.
- [2]. Zhao G, et al. Local anesthetic articaine ameliorates LPS-induced acute kidney injury via inhibition of NF-κB activation and the NLRP3 inflammasome pathway. J Biochem Mol Toxicol. 2020 Oct;34(10):e22554.
- [3]. Snoeck M. Articaine: a review of its use for local and regional anesthesia. Local Reg Anesth. 2012;5:23-33.

CAIndexNames:

2-Thiophenecarboxylic acid, 4-methyl-3-[[1-oxo-2-(propylamino)propyl]amino]-, methyl ester, hydrochloride (1:1)

SMILES:

O=C(C(C)NCCC)NC(C(C)=CS1)=C1C(OC)=O.Cl

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

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