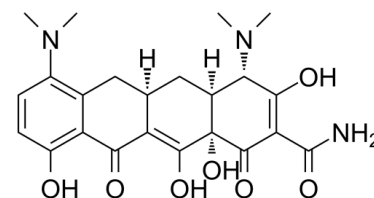


Data Sheet

Product Name:	Minocycline (hydrochloride)
Cat. No.:	CS-1256
CAS No.:	13614-98-7
Molecular Formula:	C ₂₃ H ₂₈ ClN ₃ O ₇
Molecular Weight:	493.94
Target:	Bacterial
Pathway:	Anti-infection
Solubility:	DMSO : 0.49 mg/mL (0.99 mM; Need ultrasonic and warming); H ₂ O : 11.11 mg/mL (22.49 mM; Need ultrasonic)



HCl

BIOLOGICAL ACTIVITY:

Minocycline hydrochloride is a broad-spectrum tetracycline antibiotic, acting by binding to the **bacterial** 30S ribosomal subunit and inhibiting **protein synthesis**.

References:

- [1]. Hu X, Wu B, Wang X, et al. Minocycline attenuates ischemia-induced ventricular arrhythmias in rats. *Eur J Pharmacol.* 2011 Mar 11;654(3):274-9.
- [2]. Tao R, Kim SH, Honbo N, et al. Minocycline protects cardiac myocytes against simulated ischemia-reperfusion injury by inhibiting poly(ADP-ribose) polymerase-1. *J Cardiovasc Pharmacol.* 2010 Dec;56(6):659-68. doi: 10.1097/FJC.0b013e3181faeaf0.
- [3]. Padi SS, Kulkarni SK. Minocycline prevents the development of neuropathic pain, but not acute pain: possible anti-inflammatory and antioxidant mechanisms. *Eur J Pharmacol.* 2008 Dec 28;601(1-3):79-87. doi: 10.1016/j.ejphar.2008.10.018.
- [4]. Brundula V, Rewcastle NB, Metz LM, et al. Targeting leukocyte MMPs and transmigration: minocycline as a potential therapy for multiple sclerosis. *Brain.* 2002 Jun;125(Pt 6):1297-308.
- [5]. Tikka T, Fiebich BL, Goldsteins G, et al. Minocycline, a tetracycline derivative, is neuroprotective against excitotoxicity by inhibiting activation and proliferation of microglia. *J Neurosci.* 2001 Apr 15;21(8):2580-8.

CAIndexNames:

2-Naphthacenecarboxamide, 4,7-bis(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-, hydrochloride (1:1), (4S,4aS,5aR,12aS)-

SMILES:

OC1=C(C(N)=O)C([C@@]2(O)C(O)=C3C(C4=C(O)C=CC(N(C)C)=C4C[C@@]3([H])C[C@@]2([H])[C@@H]1N(C)C)=O)=O.Cl

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA