Halazone

Cat. No.: HY-B1386

CAS No.: 80-13-7

Molecular Formula: $C_7H_5Cl_2NO_4S$

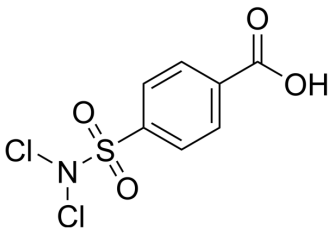
Molecular Weight: 270.09

Target: Bacterial; Carbonic Anhydrase; Sodium Channel

Pathway: Anti-infection; Metabolic Enzyme/Protease; Membrane Transporter/Ion Channel

Storage: 4°C, sealed storage, away from moisture

* The compound is unstable in solutions, freshly prepared is recommended.



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (370.25 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.7025 mL	18.5123 mL	37.0247 mL
	5 mM	0.7405 mL	3.7025 mL	7.4049 mL
	10 mM	0.3702 mL	1.8512 mL	3.7025 mL

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

BIOLOGICAL ACTIVITY

Description

Halazone is an atypical antimicrobial sulfonamide derivative and a carbonic anhydrase II inhibitor with a K_d value of 1.45 μM. Halazone protects sodium channels from inactivation. Halazone is widely used for disinfection of drinking water[1][2].

IC_{50} & Target

CA Ⅱ

In Vitro

Halazone is chemically closely related to Chloramine-T, the nitrogen atom is linked with two instead of one chlorine atom and, certainly more important here, a methyl group is replaced by a carboxyl group. The effect of Halazone on the sodium current is studied in voltage-clamped single nerve fibers of the frog. The oxidant Halazone drastically inhibits inactivation[1].

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

REFERENCES

[1]. M Rack, et al. Effects of Some Chemical Reagents on Sodium Current Inactivation in Myelinated Nerve Fibers of the Frog. Biophys J. 1986 Oct;50(4):557-64.

[2]. Rema Iyer, et al. Inhibition Profiling of Human Carbonic Anhydrase II by High-Throughput Screening of Structurally Diverse, Biologically Active Compounds. J Biomol

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA