Product Data Sheet

Chloroprocaine hydrochloride

Cat. No.: HY-B1604 CAS No.: 3858-89-7 Molecular Formula: $C_{13}H_{20}Cl_{2}N_{2}O_{2}$ Molecular Weight: 307.22

Na+/K+ ATPase Target:

Pathway: Membrane Transporter/Ion Channel

Storage: 4°C, protect from light, stored under nitrogen

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light, stored under

nitrogen)

SOLVENT & SOLUBILITY

In Vitro

H₂O: 100 mg/mL (325.50 mM; Need ultrasonic) DMSO: 83.33 mg/mL (271.24 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.2550 mL	16.2750 mL	32.5500 mL
	5 mM	0.6510 mL	3.2550 mL	6.5100 mL
	10 mM	0.3255 mL	1.6275 mL	3.2550 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 6.25 mg/mL (20.34 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 6.25 mg/mL (20.34 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 6.25 mg/mL (20.34 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Chloroprocaine hydrochloride (2-Chloroprocaine hydrochloride) is a potent inhibitor of Na,K-ATPase activity with an IC $_{50}$ of 13 mM. Chloroprocaine hydrochloride blocks peripheral nerve ^[1] .
IC ₅₀ & Target	IC50: 13 mM (Na,K-ATPase) ^[1]
In Vivo	In mice, the intravenous LD $_{50}$ of Chloroprocaine hydrochloride is 97 mg/kg and the subcutaneous LD $_{50}$ of Chloroprocaine hydrochloride is 950 mg/kg $^{[1]}$.

	MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
REFERENCES			
[1]. H Kutchai, et al. Inhibition	of the Na,K-ATPase of Canine Renal Medulla by Several Local Anesthetics. Pharmacol Res. 2001 Apr;43(4):399-403.		

[2]. Chloroprocaine HCl Injection.

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

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Page 2 of 2 www.MedChemExpress.com