Product Data Sheet

Product Name: Proparacaine Hydrochloride (Proxymetacaine Hydrochloride)
Cat. No.: GC33729

Chemical Properties

Cas. No.	5875-06-9		
SMILES	O=C(OCCN(CC)CC)C1=CC=C(OCCC)C(N)=C1.[H]Cl		
Formula	$C_{16}H_{27}ClN_2O_3$	M.Wt	330.85
Solubility	DMSO: 50 mg/mL (151.13 mM); Water: 33.33 mg/mL (100.74 mM)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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

Proparacaine Hydrochloride is a voltage-gated sodium channels antagonist with ED50 of 3.4 mM.IC50 Value: 3.4 mM(ED50) [1]Target: Sodium Channelin vitro: Proparacaine is more potent and less toxic than cocaine [1]. Proparacaine significantly increases in FHV-1 ($P < 0.01$), C. felis, and 28S rDNA Ct values when fusidic acid is used [2].in vivo: Proparacaine inhibits corneal epithelial migration and adhesion through alteration of the actin cytoskeleton [3]. Proparacaine acts like bupivacaine or lidocaine and produces dose-related spinal blockades of motor function, proprioception and nociception. Intrathecal proxymetacaine also produces longer sensory blockade than motor blockade [4].

[1]. Grant, R.L. and D. Acosta, Comparative toxicity of tetracaine, proparacaine and cocaine evaluated with primary cultures of rabbit corneal epithelial cells. Exp Eye Res, 1994. 58(4): p. 469-78. [2]. Segarra, S., K. Papasouliotis, and C. Helps, The in vitro effects of proxymetacaine, fluorescein, and fusidic acid on real-time PCR assays used for the diagnosis of Feline herpesvirus 1 and Chlamydophila felis infections. Vet Ophthalmol, 2011. 14 Suppl 1: [3]. Dass, B.A., H.K. Soong, and B. Lee, Effects of proparacaine on

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

actin cytoskeleton of corneal epithelium. J Ocul Pharmacol, 1988. 4(3): p. 187-94. [4]. Hung, C.H., et al., Intrathecal oxybuprocaine and proxymetacaine produced potent and long-lasting spinal anesthesia in rats. Neurosci Lett, 2009. 454(3): p. 249-53.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA