

Product Data Sheet

Product Name: Betaxolol

Cat. No.: GC14021

Chemical Properties

Cas. No. 63659-18-7

Chemical Name 1-(4-(2-(cyclopropylmethoxy)ethyl)phenoxy)-3-(isopropylamino)propan-2-ol

SMILES CC(NCC(O)COC1=CC=C(CCOCC2CC2)C=C1)C

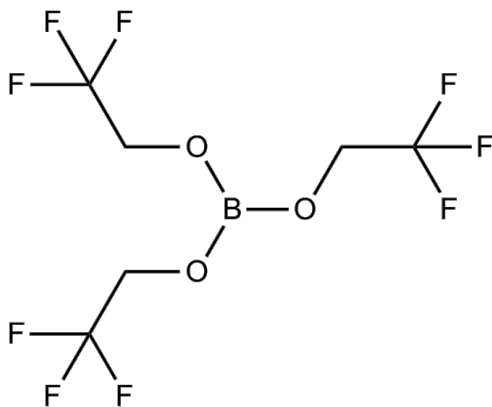
Formula $C_{18}H_{29}NO_3$ M.Wt 307.43

Solubility $\geq 30.7\text{mg/mL}$ in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C 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

Betaxolol is a selective beta1 adrenergic receptor blocker used in the treatment of hypertension and glaucoma. Target: Beta1 Adrenergic Receptor. Betaxolol is a cardioselective beta-adrenergic receptor blocking agent. Betaxolol (5 mg/kg via i.p. injection) was administered at 24 and then 44 h following the final chronic cocaine administration. Animals treated with betaxolol during cocaine withdrawal exhibited a significant attenuation of anxiety-like behavior characterized by increased time spent in the open arms and increased entries into the open arms compared to animals treated with only saline.

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

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during cocaine withdrawal. Betaxolol did not produce anxiolytic-like effects in control animals treated chronically with saline [1]. Betaxolol produces less systemic beta 2- and possibly beta 1-adrenergic receptor blockade than either timolol or levobunolol. Betaxolol may be relatively safer to use in patients with reactive airway disease than either timolol or levobunolol [2].

References:

- [1]. Rudoy, C.A. and E.J. Van Bockstaele, Betaxolol, a selective beta(1)-adrenergic receptor antagonist, diminishes anxiety-like behavior during early withdrawal from chronic cocaine administration in rats. *Prog Neuropsychopharmacol Biol Psychiatry*, 2007. 31(5): p. 1119-29.
- [2]. Lesar, T.S., Comparison of ophthalmic beta-blocking agents. *Clin Pharm*, 1987. 6(6): p. 451-63.

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