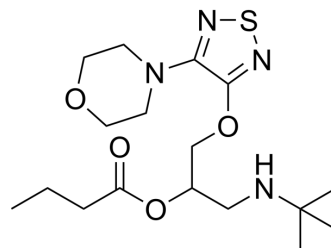


(RS)-Butyryltimolol

Cat. No.:	HY-102032A		
CAS No.:	2320274-78-8		
Molecular Formula:	C ₁₇ H ₃₀ N ₄ O ₄ S		
Molecular Weight:	386.51		
Target:	Adrenergic Receptor		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (258.73 mM)
 * "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.5873 mL	12.9363 mL	25.8726 mL
	5 mM	0.5175 mL	2.5873 mL	5.1745 mL
	10 mM	0.2587 mL	1.2936 mL	2.5873 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 5 mg/mL (12.94 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 5 mg/mL (12.94 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 5 mg/mL (12.94 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(RS)-Butyryltimolol is the racemate of Butyryltimolol. Butyryltimolol, an effective proagent of Timolol, improves the corneal penetration of Timolol^[1]. Butyryltimolol is a β-adrenergic blocker^[2].

IC₅₀ & Target

β adrenergic receptor

In Vitro

Butyryltimolol, a prodrug of Timolol, is equally effective as 240-min nasolacrimal blockade in enhancing ocular drug

absorption^[1].

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

REFERENCES

[1]. Chang SC, et al. Relative effectiveness of prodrug and viscous solution approaches in maximizing the ratio of ocular to systemic absorption of topically applied timolol. *Exp Eye Res.* 1988 Jan;46(1):59-69.

[2]. Potter DE, et al. Ocular and cardiac beta-antagonism by timolol prodrugs, timolol and levobunolol. *Curr Eye Res.* 1988 Aug;7(8):755-9.

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

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