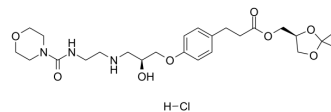


## Landiolol hydrochloride

Cat. No.:	HY-100607A
CAS No.:	144481-98-1
Molecular Formula:	C <sub>25</sub> H <sub>40</sub> ClN <sub>3</sub> O <sub>8</sub>
Molecular Weight:	546.05
Target:	Adrenergic Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 250 mg/mL (457.83 mM; Need ultrasonic)  
 H<sub>2</sub>O : ≥ 100 mg/mL (183.13 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.8313 mL	9.1567 mL	18.3133 mL
	5 mM	0.3663 mL	1.8313 mL	3.6627 mL
	10 mM	0.1831 mL	0.9157 mL	1.8313 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: ≥ 2.08 mg/mL (3.81 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (3.81 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (3.81 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Landiolol hydrochloride (ONO1101 hydrochloride) is a highly beta1 selective ultra-short acting beta-blocker (β1/β2 selectivity = 255:1, a half-life of 4 min) and acts as an adrenoceptor antagonist<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

beta-adrenergic receptor<sup>[1]</sup>

### REFERENCES

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[1]. Atarashi H, et al. Pharmacokinetics of landiolol hydrochloride, a new ultra-short-acting beta-blocker, in patients with cardiac arrhythmias. Clin Pharmacol Ther. 2000 Aug;68(2):143-50.

[2]. Okajima M, et al. Landiolol, an ultra-short-acting  $\beta$ 1-blocker, is useful for managing supraventricular tachyarrhythmias in sepsis. World J Crit Care Med. 2015 Aug 4;4(3):251-7.

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

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