# Data Sheet (Cat.No.T11607)



## ICI 118,551 hydrochloride

#### **Chemical Properties**

CAS No.: 72795-01-8

Formula: C17H28ClNO2

Molecular Weight: 313.86

Appearance: no data available

store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

### **Biological Description**

Description	ICI 118,551 hydrochloride (ICI 118551 hydrochloride) is a highly selective $\beta 2$ adrenergic receptor antagonist (Kis: 0.7, 49.5, and 611 nM for $\beta 2$ , $\beta 1$ , and $\beta 3$ receptors).		
Targets(IC50)	Adrenergic Receptor		
In vitro	ICI 118551 (10 $\mu$ M) induces a prominent vasorelaxation of norepinephrine (NE)-precontracted PA but not AO [2]. ICI 118551 inhibits cAMP accumulation in IMCD cells (IC50: 1.7 $\mu$ M) [1]. In the failing human heart, ICI 118551 has significant effects on beat duration, with time-to-peak contraction and time-to-90% relaxation reduced compared with basal contraction. Negative Inotropic Effect of ICI 118551 Is Not cAMP-Related. Overexpression of $\beta$ 2AR in rabbit myocytes enhances the negative inotropic effects of ICI 118551 [3].		
In vivo	ICI 118551 (0.2 mg/kg) injected into the jugular vein of the mice, strongly reduces systolic pressure in the pulmonary circuit but not systemic arterial pressure in vivo[2].		

#### **Solubility Information**

Solubility	DMSO: 20 mg/mL (63.72 mM), Sonication is recommended.	20 mg/mL (63.72 mM), Sonication is recommended.	
	H2O: 11.11 mg/mL (35.4 mM), Sonication is recommended.		
	(< 1 mg/ml refers to the product slightly soluble or insoluble)		

#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	3.1861 mL	15.9307 mL	31.8613 mL
5 mM	0.6372 mL	3.1861 mL	6.3723 mL
10 mM	0.3186 mL	1.5931 mL	3.1861 mL
50 mM	0.0637 mL	0.3186 mL	0.6372 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

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#### Reference

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Gong H, et al. Specific beta(2)AR blocker ICI 118,551 actively decreases contraction through a G(i)-coupled form of the beta(2)AR in myocytes from failing human heart. Circulation. 2002 May 28;105(21):2497-503.

Hoffmann C, et al. Comparative pharmacology of human beta-adrenergic receptor subtypes--characterization of stably transfected receptors in CHO cells. Naunyn Schmiedebergs Arch Pharmacol. 2004 Feb;369(2):151-9.

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