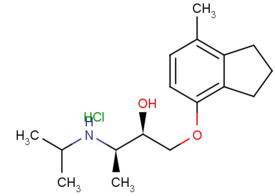


## Data Sheet (Cat.No.T11607)

ICI 118,551 hydrochloride

### Chemical Properties

CAS No.:	72795-01-8
Formula:	C17H28ClNO2
Molecular Weight:	313.86
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



### Biological Description

Description	ICI 118,551 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(IC <sub>50</sub> )	$\beta_2$ receptor: ki:0.7nM $\beta_1$ receptor: 49.5 nM (ki) $\beta_3$ receptor(ki): 611 nM (ki)
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 (IC <sub>50</sub> : 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 $\beta_2$ AR 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, reduces systolic pressure in the pulmonary circuit but not systemic arterial pressure [2].

### Solubility Information

Solubility	DMSO: 25 mg/mL (79.65 mM) H <sub>2</sub> O: 12.5 mg/mL (39.83 mM) ( < 1 mg/ml refers to the product slightly soluble or insoluble)
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#### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.186 mL	15.931 mL	31.861 mL
5 mM	0.637 mL	3.186 mL	6.372 mL
10 mM	0.319 mL	1.593 mL	3.186 mL
50 mM	0.064 mL	0.319 mL	0.637 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Yasuda G, et al. The beta 1- and beta 2-adrenoceptor subtypes in cultured rat inner medullary collecting duct cells. *Am J Physiol.* 1996 Sep;271(3 Pt 2):F762-9.
2. Wenzel D, et al. beta(2)-adrenoceptor antagonist ICI 118,551 decreases pulmonary vascular tone in mice via a G(i/o) protein/nitric oxide-coupled pathway. *Hypertension.* 2009 Jul;54(1):157-63.
3. 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.
4. 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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