Web: www.taiclone.com
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ICI 118,551 (hydrochloride)

Catalog No: tcsc1690

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
72795-01-8

Formula:
$C_{17}H_{28}ClNO_2$

Pathway:
GPCR/G Protein; Neuronal Signaling

Target:
Adrenergic Receptor

Form:
White to off-white (Solid)

Purity / Grade:
99.76%

Solubility:
H2O : 12.5 mg/mL (39.83 mM; Need ultrasonic)
DMSO : 33.33 mg/mL (106.19 mM; Need ultrasonic)

Storage Instruction:
2-8°C, sealed storage, away from moisture

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Alternative Names:
ICI 118551 hydrochloride; 2-Butanol, 1-[(2,3-dihydro-7-methyl-1H-inden-4-yl)oxy]-3-[(1-methylethyl)amino]-, hydrochloride(1:1), (2R,3R)-rel

Observed Molecular Weight:
313.86

References

[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.

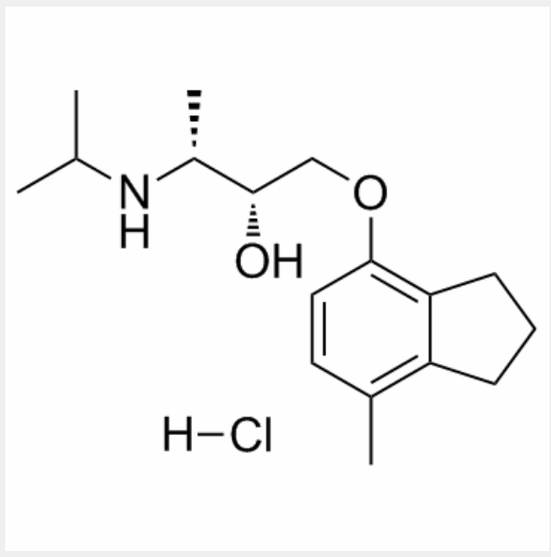
Product Description

ICI 118,551 (hydrochloride) is a highly selective **β2 adrenergic receptor** antagonist, with **K_i** values of 0.7, 49.5 and 611 nM for β2, β1 and β3 receptors, respectively.

IC50 & Target: Ki: 0.7nM (β2 receptor), 49.5 nM (β1 receptor), 611 nM (β3 receptor)

In Vitro: ICI 118551 inhibits cAMP accumulation with IC_{50} of 1.7 μM in IMCD cells[1]. ICI 118551 (10 μM) induces a prominent vasorelaxation of norepinephrine (NE)-precontracted PA but not AO[2]. In 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 β2AR in rabbit myocytes enhances 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].



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