

## Certificate of Analysis

www.tocris.com

**Product Name:** ICI 118,551 hydrochloride

**Catalog No.:** 0821

**Batch No.:** 5

CAS Number: 72795-01-8

IUPAC Name: (±)-*erythro*-(S\*,S\*)-1-[2,3-(Dihydro-7-methyl-1*H*-inden-4-yl)oxy]-3-[(1-methylethyl)amino]-2-butanol hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>17</sub>H<sub>27</sub>NO<sub>2</sub>.HCl

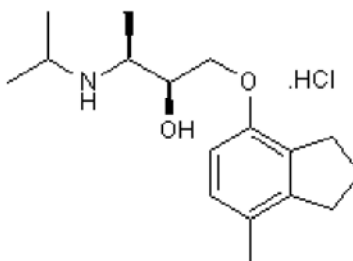
**Batch Molecular Weight:** 313.87

**Physical Appearance:** White solid

**Solubility:** DMSO to 10 mM  
water to 10 mM

**Storage:** Store at RT

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.68 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

**HPLC:** Shows 100% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	65.05	8.99	4.46
Found	65.04	9.03	4.56

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

**Product Name:** ICI 118,551 hydrochloride

**Catalog No.:** 0821

**Batch No.:** 5

CAS Number: 72795-01-8

IUPAC Name: (±)-*erythro*-(S\*,S\*)-1-[2,3-(Dihydro-7-methyl-1*H*-inden-4-yl)oxy]-3-[(1-methylethyl)amino]-2-butanol hydrochloride

**Description:**

Very selective  $\beta_2$  adrenergic inverse agonist ( $K_i$  values are 1.2, 120 and 257 nM for  $\beta_2$ ,  $\beta_1$  and  $\beta_3$  receptors respectively). Active in vivo. Also available as part of the  $\beta$ -Adrenoceptor Antagonist Tocriset™.

**Physical and Chemical Properties:**

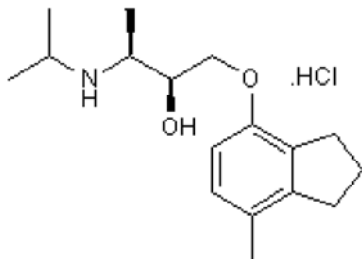
Batch Molecular Formula: C<sub>17</sub>H<sub>27</sub>NO<sub>2</sub>.HCl

Batch Molecular Weight: 313.87

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 10 mM

water to 10 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**Licensing Information:**

Sold with the permission of AstraZeneca UK Ltd.

**References:**

**Strosberg and Pietri-Rouxel** (1996) Function and regulation of the  $\beta_3$ -adrenoceptor. *TIPS* **17** 373. PMID: 8979772.

**Bond et al** (1995) Physiological effects of inverse agonists in transgenic mice with myocardial overexpression of the  $\beta_2$ -adrenoceptor. *Nature* **374** 272. PMID: 7885448.

**Ten Berge et al** (1995)  $\beta_2$ -but not  $\beta_3$ -adrenoceptors mediate prejunctional inhibition of non-adrenergic non cholinergic contraction of guinea pig main bronchi. *Eur.J.Pharmacol.* **275** 199. PMID: 7796855.

**Cook et al** (1993)  $\beta$ -Adrenoceptor subtypes and the opening of plasmalemmal K<sup>+</sup>-channels in trachealis muscle: electrophysiological and mechanical studies in guinea-pig tissue. *Br.J.Pharmacol.* **109** 1140. PMID: 8104643.

**Bilski et al** (1983) The pharmacology of a  $\beta_2$ -selective adrenoceptor antagonist (ICI-118,551). *J.Cardiovasc.Pharmacol.* **5** 430. PMID: 6191142.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956