

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** Yohimbine hydrochloride

**Catalog No.:** 1127

**Batch No.:** 7

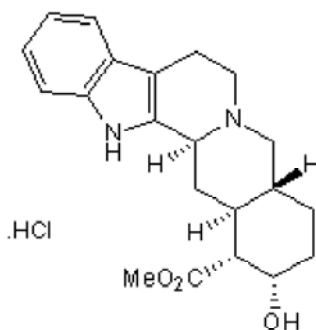
CAS Number: 65-19-0

EC Number: 200-600-4

IUPAC Name: 17 $\alpha$ -Hydroxyyohimban-16 $\alpha$ -carboxylic acid methyl ester hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>.HCl  
**Batch Molecular Weight:** 390.91  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 20 mM with gentle warming  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.2% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	64.52	6.96	7.16
Found	64.38	6.96	7.19

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](http://www.tocris.com/distributors)  
 Tel: +1 612 379 2956

**Product Name:** Yohimbine hydrochloride

**Catalog No.:** 1127

**Batch No.:** 7

CAS Number: 65-19-0

EC Number: 200-600-4

IUPAC Name: 17 $\alpha$ -Hydroxyyohimban-16 $\alpha$ -carboxylic acid methyl ester hydrochloride

**Description:**

$\alpha_2$ -adrenoceptor antagonist (pK<sub>i</sub> values are 8.52, 8.00 and 9.17 for human  $\alpha_{2A}$ ,  $\alpha_{2B}$  and  $\alpha_{2C}$  receptors respectively). Diastereomer also available.

**Physical and Chemical Properties:**

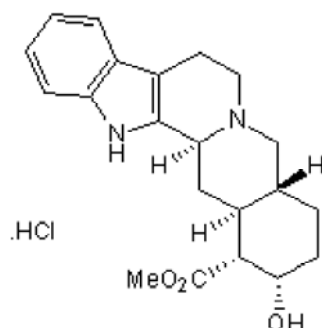
Batch Molecular Formula: C<sub>21</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>.HCl

Batch Molecular Weight: 390.91

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 20 mM with gentle warming

**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.

**References:**

**Lalchandani et al** (2002) Yohimbine dimers exhibiting selectivity for the human  $\alpha_{2c}$ -adrenoceptor subtype. *J.Pharmacol.Exp.Ther.* **303** 979. PMID: 12438517.

**Redfern and Williams** (1995) A re-evaluation of the role of  $\alpha_2$ -adrenoceptors in the anxiogenic effects of yohimbine, using the selective antagonist dequalamine in the rat. *Br.J.Pharmacol.* **116** 2081. PMID: 8640349.

**Goldberg and Robertson** (1987) Yohimbine: a pharmacological probe for study of the  $\alpha_2$ -adrenoceptor. *Pharmacol.Rev.* **35** 143.

**Doxey et al** (1984) Comparison of the  $\alpha$ -adrenoceptor antagonist profiles of idazoxan (RX 781094), yohimbine, rauwolscine and corynanthine. *Naunyn Schmiedebergs Arch.Pharmacol.* **325** 136. PMID: 6144048.

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