



Certificate of Analysis

www.tocris.com

Product Name: Yohimbine hydrochloride Catalog No.: 1127 Batch No.: 8

CAS Number: 65-19-0 EC Number: 200-600-4

IUPAC Name: 17α -Hydroxyyohimban- 16α -carboxylic acid methyl ester hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{26}N_2O_3.HCI.$

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 98.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 64.52 6.96 7.17 Found 64.53 6.97 7.14

Product Information

Print Date: Jul 3rd 2024

8

www.tocris.com

Product Name: Yohimbine hydrochloride

CAS Number: 65-19-0 EC Number: 200-600-4

IUPAC Name: 17α -Hydroxyyohimban- 16α -carboxylic acid methyl ester hydrochloride

Description:

Yohimbine hydrochloride is a α_2 -adrenoceptor antagonist (pK_i values are 8.52, 8.00 and 9.17 for human α_{2A} , α_{2B} and α_{2C} receptors respectively). Diastereomer also available.

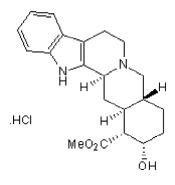
Physical and Chemical Properties:

Batch Molecular Formula: C₂₁H₂₆N₂O₃.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).

Catalog No.: 1127

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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 α_{2c} -adrenoceptor subtype. J.Pharmacol.Exp.Ther. **303** 979. PMID: 12438517.

Redfern and Williams (1995) A re-evaluation of the role of α_2 -adrenoceptors in the anxiogenic effects of yohimbine, using the selective antagonist delequamine in the rat. Br.J.Pharmacol. **116** 2081. PMID: 8640349.

Goldberg and Robertson (1987) Yohimbine: a pharmacological probe for study of the α_2 -adrenoceptor. Pharmacol.Rev. **35** 143.