



Certificate of Analysis

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Product Name: Cyanopindolol hemifumarate Catalog No.: 0993 Batch No.: 4

CAS Number: 69906-86-1

IUPAC Name: 4-[3-[tert-Butylamino]-2-hydroxypropoxy]-1H-indole-2-carbonitrile hemifumarate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{16}H_{21}N_3O_2$. $^{1/2}C_4H_4O_4$

Batch Molecular Weight: 345.4 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: R_f = 0.22 (Ethyl acetate:Petroleum ether:Ammonia [5:4:1])

Melting Point:

HPLC:

Shows 99.7% purity

TH NMR:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 62.59 6.71 12.16 Found 62.29 6.77 12.05



Product Information

Print Date: Feb 24th 2016

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IUPAC Name: 4-[3-[tert-Butylamino]-2-hydroxypropoxy]-1H-indole-2-carbonitrile hemifumarate

Description:

 $5\text{-HT}_{1\text{A}/1\text{B}}$ antagonist with roughly equal affinity at each receptor;

also a β -adrenoceptor antagonist.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{16}H_{21}N_3O_2$. $\frac{1}{2}C_4H_4O_4$

Batch Molecular Weight: 345.4 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 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.

References:

Engel *et al* (1986) Identity of presynaptic 5-hydroxytryptamine (5-HT) autoreceptors in the rat brain cortex with 5-HT1_B binding sites. Naunyn Schmiedebergs Arch.Pharmacol. **332** 1. PMID: 2936965.

Blue *et al* (1989) Interaction of dihydroalprenolol and cyanopindolol with atypical β-adrenoceptors in guinea-pig ileum. Br.J.Pharmacol. *96* 246P.

Giles *et al* (1996) Characterization of a 5-HT_{1B} receptor on CHO cells: functional responses in the absence of radioligand binding. Br.J.Pharmacol. *117* 1119. PMID: 8882605.

Hoey et al (1996) Atypical responses of rat ileum to pindolol, cyanopindolol and iodocyanopindolol. Br.J.Pharmacol. **117** 712. PMID: 8646418.