



Certificate of Analysis

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Product Name: DR 4485 hydrochloride Catalog No.: 5005 Batch No.: 1

CAS Number: 402942-53-4

IUPAC Name: 6-Chloro-2a-[4-[4-(4-chlorophenyl)-3,6-dihydro-1(2H)-pyridinyl]butyl]-2a,3,4,5-tetrahydrobenz[cd]indol-2(1H)-one

hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{26}H_{28}CI_2N_2O.HCI.H_2O$

Batch Molecular Weight: 509.9

Physical Appearance: Off-white solid
Solubility: DMSO to 100 mM
Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.12$ (Chloroform:Methanol [95:5])

HPLC: Shows >99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 61.24 6.13 5.49 Found 61.22 6.01 5.46



Product Information

Print Date: Jan 14th 2016 **WWW.tocris.com**

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Description:

High affinity and selective 5-HT_7 antagonist (pK_i = 8.14). Exhibits selectivity for 5-HT_7 over other 5-HT receptors. Inhibits 5-HT-induced cAMP accumulation in HEK-293 cells expressing the 5-HT_7 receptor. Orally bioavailable.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{26}H_{28}Cl_2N_2O.HCl.H_2O$

Batch Molecular Weight: 509.9 Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Desiccate 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:

Kikuchi *et al* (2003) New tetrahydrobenzindoles as potent and selective 5-HT(7) antagonists with increased In vitro metabolic stability. Bioorg.Med.Chem.Lett. *13* 61. PMID: 12467617.

Medina et al (2009) Synthesis of new serotonin 5-HT7 receptor ligands. Determinants of 5-HT7/5-HT1A receptor selectivity. J.Med.Chem. **52** 2384. PMID: 19326916.