



Certificate of Analysis

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Product Name: Rimcazole dihydrochloride Catalog No.: 1497 Batch No.: 2

CAS Number: 75859-03-9

IUPAC Name: 9-[3-(cis-3,5-Dimethyl-1-piperazinyl)propyl]-9H-carbazole dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C21H27N3.2HCl.H₂O

Batch Molecular Weight: 412.41

Physical Appearance: White solid

Solubility: water to 10 mM
1eq. HCl to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.66$ (Dichloromethane:Methanol [85:15])

Melting Point: Between 260 - 262°C(dec)

HPLC: Shows 99.3% purity

¹H NMR: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen Chlorine

Theoretical 61.16 7.58 10.19 17.19 Found 61.48 7.24 10.18 17.31



Product Information

Print Date: Apr 28th 2015

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Description:

Antagonist at σ receptors (IC $_{50}$ values are 1480 and 386 nM at σ_1 and σ_2 receptors respectively). Also binds to the dopamine transporter (IC $_{50}$ = 57.6 nM) and inhibits dopamine uptake. Reduces the stimulatory effects of cocaine in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C21H27N3.2HCl.H2O

Batch Molecular Weight: 412.41 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

water to 10 mM 1eg. HCl 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).

Catalog No.: 1497

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:

Ferris et al (1986) Evidence that the potential antipsychotic agent rimcazole (BW 234U) is a specific, competitive antagonist of sigma sites in brain. Life Sci. 38 2329. PMID: 2873494.

Husbands *et al* (1997) Isothiocyanate derivatives of 9-[3-(*cis*-3,5-dimethyl-1-piperazinyl)propyl]-carbazole (Rimcazole): irreversible ligands for the dopamine transporter. J.Med.Chem. *40* 4340. PMID: 9435903.

Matsumoto et al (2001) Rimcazole analogs attenuate the convulsive effects of cocaine: correlation with binding to sigma receptors rather than dopamine transporters. Neuropharmacology 41 878. PMID: 11684152.

