

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: Zotepine Catalog No.: 3996 Batch No.: 1

CAS Number: 26615-21-4

IUPAC Name: 2-[(8-Chlorodibenzo(Z)[b,f]thiepin-10-yl)oxy]-N,N-dimethylethanamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₈H₁₈CINOS

Batch Molecular Weight: 331.86

Physical Appearance: White solid

Solubility: DMSO to 50 mM

ethanol to 50 mM

Storage: Store at RT

Batch Molecular Structure:

O___NMe2

2. ANALYTICAL DATA

Melting Point:Between 90 - 92°CHPLC:Shows 99.7% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 65.15 5.47 4.22 Found 64.95 5.42 4.28



Product Information

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Description:

Product Name:

5-HT_{2A} receptor and dopamine D₂ receptor antagonist (K_i values are 0.69 and 2.3 nM respectively). Also a potent histamine H₁ receptor antagonist ($IC_{50} = 8.0$ nM). Atypical antipsychotic; exhibits antidepressive and anxiolytic effects in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₁₈CINOS Batch Molecular Weight: 331.86 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 50 mM ethanol to 50 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:

Herrick-Davis et al (2000) Inverse agonist activity of atypical antipsychotic drugs at human 5-hydroxytryptamine2C receptors. J.Pharmacol.Exp.Ther. 295 226. PMID: 10991983.

Yamamura et al (2009) Effects of zotepine on extracellular levels of monamine, GABA and glutamate in rat prefrontal cortex. Br.J.Pharmacol. 157 656. PMID: 19371334.

Shobo et al (2010) Norzotepine, a major metabolite of zotepine, exerts atypical antipsychotic-like and antidepressant-like actions through its potent inhibition of norepinephrine reuptake. J.Pharmacol.Exp.Ther. 333 772. PMID: 20223878.