

Certificate of Analysis

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Product Name: Methiothepin maleate

Catalog No.: 0582

Batch No.: 7

CAS Number: 19728-88-2

IUPAC Name: 1-[10,11-Dihydro-8-(methylthio)dibenzo(Z)[b,f]thiepin-10-yl]-4-methylpiperazine maleate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{24}N_2S_2 \cdot C_4H_4O_4$

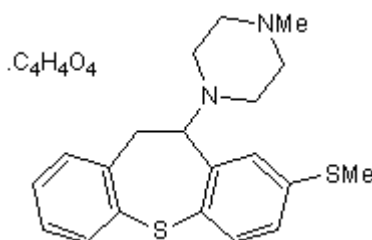
Batch Molecular Weight: 472.62

Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical	60.99	5.97	5.93
Found	60.94	5.94	5.9

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel: +1 612 379 2956

Product Information

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Description:

Potent 5-HT₂ antagonist, also active as 5-HT₁ antagonist. Differentiates 5-HT_{1D} sub-types. Also displays affinity for rodent 5-HT_{5B}, 5-HT_{5A}, 5-HT₇ and 5-HT₆ receptors (pK₁ values are 6.6, 7.0, 8.4 and 8.7 respectively).

Physical and Chemical Properties:

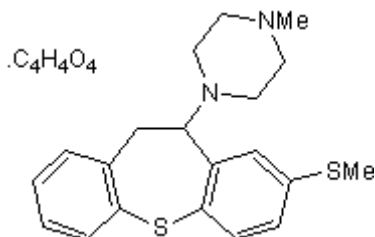
Batch Molecular Formula: C₂₀H₂₄N₂S₂.C₄H₄O₄

Batch Molecular Weight: 472.62

Physical Appearance: White solid

Minimum Purity: >99%

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:

Hoyer (1989) The peripheral actions of 5-HT. Ed. Fozard. Oxford..

Wilkinson and Middlemiss (1992) Metitepine distinguishes two receptors mediating inhibition of [³H]-5-hydroxytryptamine release in guinea pig hippocampus. Naunyn Schmiedeberg's Arch.Pharmacol. **345** 696. PMID: 1321958.

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info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

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Tel: +1 612 379 2956