

Certificate of Analysis

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Product Name: TC 1

Catalog No.: 2669

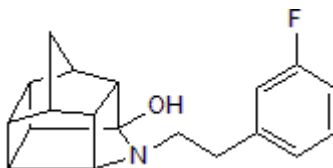
Batch No.: 2

CAS Number: 362512-81-0

IUPAC Name: (N-(3'-Fluorophenyl)ethyl-4-azahexacyclo[5.4.1.0.2,6.0.3,10.0.5,9.0.8,11]dodecan-3-ol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₂₀FNO
Batch Molecular Weight: 297.37
Physical Appearance: White solid
Solubility: DMSO to 50 mM with gentle warming
 ethanol to 50 mM with gentle warming
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.5 (Dichloromethane:Methanol [9:2])
HPLC: Shows >99.9% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	76.74	6.78	4.71
Found	76.7	6.79	4.69

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

Product Information

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Batch No.: 2

CAS Number: 362512-81-0

IUPAC Name: (N-(3'-Fluorophenyl)ethyl-4-azahexacyclo[5.4.1.02,6.03,10.05,9.08,11]dodecan-3-ol

Description:

High affinity σ_1 receptor ligand that displays selectivity over σ_2 receptors (K_i values are 10 and 370 nM respectively). Exhibits low affinity for dopamine (DAT), serotonin (SERT) and noradrenalin (NET) transporters ($K_i > 10 \mu\text{M}$) and low affinity for dopamine D_2 receptors ($K_i = 1226 \text{ nM}$). Attenuates cocaine-induced locomotor activity in mice.

Physical and Chemical Properties:

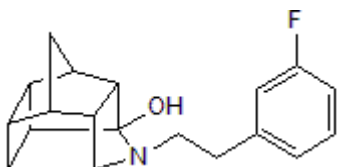
Batch Molecular Formula: $\text{C}_{19}\text{H}_{20}\text{FNO}$

Batch Molecular Weight: 297.37

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 50 mM with gentle warming
ethanol to 50 mM with gentle warming

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:

Liu *et al* (2007) Trishomocubanes: novel σ ligands modulate cocaine-induced behavioural effects. *Eur.J.Pharmacol.* **555** 37. PMID: 17113074.

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