Product Name: Tetrabenazine  
Catalog No.: 2175  
Batch No.: 3  
CAS Number: 58-46-8  
EC Number: 200-383-6  
IUPAC Name: (3R,11bR)-rel-1,3,4,6,7,11b-hexahydro-9,10-dimethoxy-3-(2-methylpropyl)-2H-benzo[a]quinolizin-2-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{19}H_{27}NO_{3}  
Batch Molecular Weight: 317.2  
Physical Appearance: White solid  
Solubility: ethanol to 30 mM  
DMSO to 100 mM  
Storage: Store at +4°C

2. ANALYTICAL DATA

TLC:  
R_f = 0.29 (Diethyl ether:Petroleum ether [1:1])

HPLC:  
Shows 99.7% purity  
Consistent with structure

^1H NMR:  
Consistent with structure

Mass Spectrum:  
Consistent with structure

Microanalysis:  
Carbon Hydrogen Nitrogen  
Theoretical: 71.89 8.57 4.41  
Found: 71.72 8.72 4.39

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

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Description:
Potent inhibitor of vesicular monoamine uptake; depletes stores of dopamine, serotonin and noradrenalin. Binds with high affinity (IC₅₀ = 3.2 nM) to vesicular monoamine transporter (VMAT) in chromaffin granule membranes and displays higher affinity for VMAT2 than VMAT1. Also reported to block dopamine receptors. Causes behavioral depression; inhibits locomotor activity and produces hypothermia upon systemic administration in rats and mice.

Physical and Chemical Properties:
Batch Molecular Formula: C_{19}H_{27}NO₃
Batch Molecular Weight: 317.2
Physical Appearance: White solid
Minimum Purity: >98%

Storage: Store at +4°C

Solubility & Usage Info:
- ethanol to 30 mM
- 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: