

Certificate of Analysis

Product Name: SKF 83822 hydrobromide

Catalog No.: 2075

Batch No.: 4

CAS Number: 74115-10-9

IUPAC Name: 6-Chloro-2,3,4,5-tetrahydro-1-(3-methylphenyl)-3-(2-propenyl)-1*H*-3-benzazepine-7,8-diol hydrobromide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₀H₂₂ClNO₂·HBr

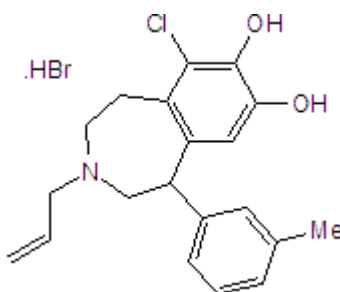
Batch Molecular Weight: 424.76

Physical Appearance: White solid

Solubility: ethanol to 10 mM
DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.56 (Dichloromethane:Methanol:Ammonia soln. [90:9:1])

HPLC: Shows 99.2% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	56.55	5.46	3.3
Found	56.55	5.5	3.45

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

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Description:

High affinity, selective dopamine D₁-like receptor agonist. K_i values are 3.2, 3.1, 186, 66, 335, 1167, 1251 and 1385 nM at recombinant D₁, D₅, D₂, D₃, D₄, 5-HT_{2A}, α_{1A} and α_{1B} receptors respectively. Stimulates adenylyl cyclase (EC₅₀ = 65 nM) but not phosphoinositide hydrolysis. Induces extreme arousal and hyperlocomotion following subcutaneous administration in monkeys.

Physical and Chemical Properties:

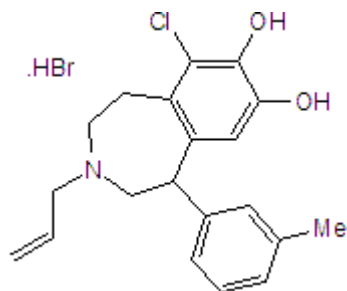
Batch Molecular Formula: C₂₀H₂₂ClNO₂.HBr

Batch Molecular Weight: 424.76

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Undie et al (1994) Evidence for a distinct D₁-like dopamine receptor that couples to activation of phosphoinositide metabolism in brain. *J.Neurochem.* **62** 2045. PMID: 7908949.

Peacock and Gerlach (2001) Aberrant behavioural effects of a dopamine D₁ receptor antagonist and agonist in monkeys: evidence of uncharted dopamine D₁ receptor actions. *Biol.Psychiatry* **50** 501. PMID: 11600103.

O'Sullivan et al (2004) SK&F 83822 distinguishes adenylyl cyclase from phospholipase C-coupled D₁-like receptors: behavioural topography. *Eur.J.Pharmacol.* **486** 273. PMID: 14985049.

Storage: Store at RT

Solubility & Usage Info:

ethanol to 10 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.

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