

Certificate of Analysis

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Product Name: (+)-AJ 76 hydrochloride

Catalog No.: 0678

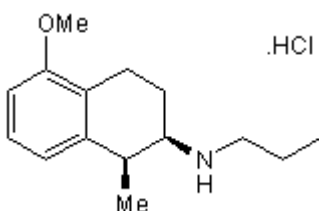
Batch No.: 5

CAS Number: 85378-82-1

IUPAC Name: (1S,2R)-cis-5-Methoxy-1-methyl-2-(N-propylamino)tetralin hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₂₃NO.HCl
Batch Molecular Weight: 269.81
Physical Appearance: White crystalline solid
Solubility: water to 10 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.5 (Dichloromethane:Methanol [9:1])
Melting Point: Between 281 - 282°C
¹H NMR: Consistent with structure
Optical Rotation: [α]_D = +54.33 (Concentration = 0.91, Solvent = Methanol)
Microanalysis:

	Carbon Hydrogen Nitrogen			
Theoretical	66.77	8.97	5.19	0 0 0
Found	66.73	9.24	5.18	0 0 0

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

Product Information

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Description:

Dopamine receptor antagonist with preferential action at presynaptic receptors (pK_i values are 6.95, 6.67, 6.37, 6.21 and 6.07 at hD₃, hD₄, hD_{2S}, hD_{2L} and rD₂ receptors respectively).

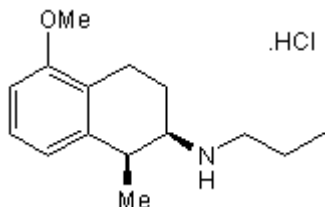
Physical and Chemical Properties:

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Storage: Store at RT

Solubility & Usage Info:

water to 10 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:

Johansson et al (1987) Resolved *cis* and *trans*-2-amino-5-methoxy-1-methyltetralins: central dopamine receptor agonists and antagonists. *J.Med.Chem.* **30** 602. PMID: 3560156.

Kullingsjo et al (1991) Effects of repeated administration of the preferential dopamine autoreceptor antagonist, (+)-AJ76, on locomotor activity and brain DA metabolism in the rat. *Eur.J.Pharmacol.* **205** 241. PMID: 1817961.

Waters et al (1994) Intracerebral infusion of (+)-AJ76 and (+)-UH232: effects on dopamine release and metabolism in vivo. *Eur.J.Pharmacol.* **251** 181. PMID: 8149975.

Millan et al (2004) The role of dopamine D₃ compared with dopamine D₂ receptors in the control of locomotor activity: a combined behavioural and neurochemical analysis with novel, selective antagonists in rats. *Psychopharmacology* **174** 341. PMID: 14985929.

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