

**Product Name:** RN 1 dihydrochloride

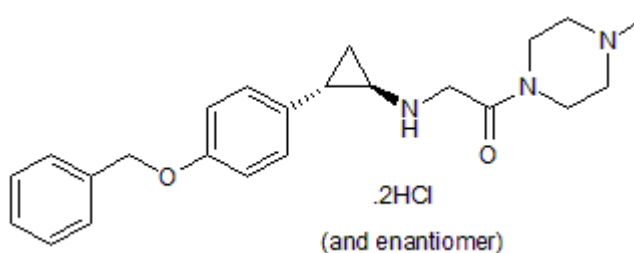
**Catalog No.:** 4977

**Batch No.:** 1

**IUPAC Name:** 1-(4-methyl-1-piperazinyl)-2-[[[(1*R*\*,2*S*\*)-2-[4-phenylmethoxy)phenyl]cyclopropyl]amino]ethanone dihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>23</sub>H<sub>29</sub>N<sub>3</sub>O<sub>2</sub>·2HCl·2¾H<sub>2</sub>O  
**Batch Molecular Weight:** 501.96  
**Physical Appearance:** Yellow solid  
**Solubility:** water to 20 mM  
DMSO to 20 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 97.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	55.04	7.33	8.37
Found	55.07	6.8	8.46

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**R&D**  
SYSTEMS®

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**Description:**

Inhibitor of lysine specific demethylase 1 (LSD1); exhibits selectivity for LSD1 over monoamine oxidase (MAO)-A and MAO-B (IC<sub>50</sub> values are 70 nM, 0.51 and 2.79 μM respectively, in a horseradish peroxidase-coupled assay). Shown to impair long-term, but not short-term memory in mice. Brain penetrant following systemic administration.

**Physical and Chemical Properties:**

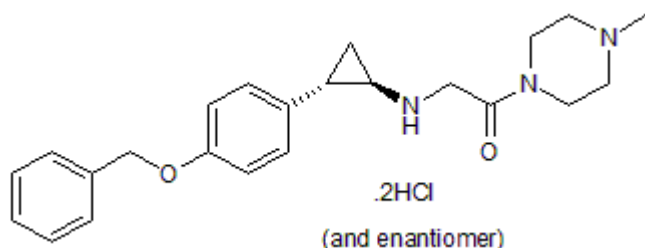
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Batch Molecular Weight: 501.96

Physical Appearance: Yellow solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

water to 20 mM

DMSO to 20 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:**

**Neelamegam** *et al* (2012) Brain-penetrant LSD1 inhibitors can block memory consolidation. *ACS Chem.Neurosci.* **3** 120. PMID: 22754608.

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