

# Certificate of Analysis

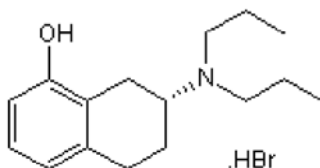
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**Product Name:** (R)-(+)-8-Hydroxy-DPAT hydrobromide  
**CAS Number:** 78095-19-9  
**IUPAC Name:** (2R)-(+)-8-Hydroxy-2-(di-*n*-propylamino)tetralin hydrobromide

**Catalog No.:** 1080 **Batch No.:** 5

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>25</sub>NO.HBr  
**Batch Molecular Weight:** 328.29  
**Physical Appearance:** White solid  
**Solubility:** water to 75 mM  
DMSO to 75 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.38 (Dichloromethane:Methanol:Triethylamine [8:1:0.1])  
**Melting Point:** Between 184 - 186°C  
**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure

### Microanalysis:

|             | Carbon Hydrogen Nitrogen |      |      |
|-------------|--------------------------|------|------|
| Theoretical | 58.54                    | 7.98 | 4.26 |
| Found       | 58.52                    | 8.05 | 4.23 |

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

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**IUPAC Name:** (2R)-(+)-8-Hydroxy-2-(di-*n*-propylamino)tetralin hydrobromide

**Description:**

(R)-(+)-8-Hydroxy-DPAT hydrobromide is a full 5-HT<sub>1A</sub> serotonin receptor agonist. Reduces hippocampal 5-HT levels following systemic administration in rats in vivo. More active enantiomer of 8-Hydroxy-DPAT hydrobromide. Racemate and 7-Hydroxy Isomer also available.

**Physical and Chemical Properties:**

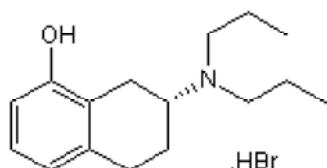
Batch Molecular Formula: C<sub>16</sub>H<sub>25</sub>NO.HBr

Batch Molecular Weight: 328.29

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

water to 75 mM

DMSO to 75 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:**

**Yoshitake and Kehr** (2004) Differential effects of (R)-, (R, S)- and (S)-8-hydroxy-2-(di-*n*-propylamino)tetralin on hippocampal serotonin release and induction of hypothermia in awake rats. *Life Sci.* **74** 2865. PMID: 15050424.

**Corrfield et al** (1991) Intrinsic activity of enantiomers of 8-hydroxy-2-(di-*n*-propylamino)tetralin and its analogues at 5-hydroxytryptamine<sub>1A</sub> receptors that are negatively coupled to adenylate cyclase. *Mol. Pharmacol.* **39** 780. PMID: 1828859.

**Bjork et al** (1989) Resolved N,N-dialkylated 2-amino-8-hydroxytetralins: stereoselective interactions with 5-HT<sub>1A</sub> receptors in the brain. *J. Med. Chem.* **32** 779. PMID: 2522991.

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