Print Date: May 9th 2013

Certificate of Analysis

www.tocris.com

Product Name: 8-Hydroxy-DPAT hydrobromide **Catalog No.: 0529** **Batch No.: 12**

CAS Number: 76135-31-4

IUPAC Name: (±)-8-Hydroxy-2-dipropylaminotetralin hydrobromide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{16}H_{25}NO.HBr$

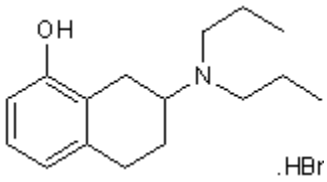
Batch Molecular Weight: 328.29

Physical Appearance: white solid

Solubility: ethanol to 5 mM
water to 20 mM with gentle warming
phosphate buffered saline to 15 mM with gentle warming

Storage: Desiccate at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	58.54	7.98	4.27
Found	58.2	7.87	4.16

Product Name: 8-Hydroxy-DPAT hydrobromide **Catalog No.: 0529** **Batch No.: 12**

CAS Number: 76135-31-4

IUPAC Name: (±)-8-Hydroxy-2-dipropylaminotetralin hydrobromide

Description:

The standard selective 5-HT_{1A} agonist. Also has moderate affinity for 5-HT_7 receptors (pK_i is 6.6 at the human 5-HT_7 receptor expressed in HEK 293 cells). Reduces hippocampal 5-HT levels following systemic administration in rats in vivo. (R)-(+)-8-Hydroxy-DPAT hydrobromide (Cat. No. 1080) and 7-Hydroxy-DPAT hydrobromide (Cat. No. 0706) also available.

Physical and Chemical Properties:

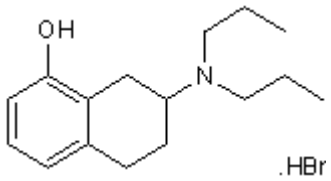
Batch Molecular Formula: $C_{16}H_{25}NO.HBr$

Batch Molecular Weight: 328.29

Physical Appearance: white solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

ethanol to 5 mM
water to 20 mM with gentle warming
phosphate buffered saline to 15 mM with gentle warming

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:

Middlemiss *et al* (1983) 8-OH-DPAT discriminates between subtypes of the $5HT_1$ recognition site. Eur.J.Pharmacol. ***90*** 151. PMID: 6223827.

Helton and Colbert (1994) Alteration of in-vitro 5-HT receptor pharmacology as a function of multiple treatment with 5-hydroxytryptamine of 8-hydroxy-2-(di-*N*-propylamino)tetralin in rat isolated aorta, uterus and fundus, and guinea pig isolated trachea. J.Pharm.Pharmacol. ***46*** 902. PMID: 7897596.

Wood *et al* (2000) Antagonist activity of meta-chlorophenylpiperazine and partial agonist activity of 8-OH-DPAT at the 5-HT_7 receptor. Eur.J.Pharmacol. ***396*** 1. PMID: 10822046.

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.