

## Certificate of Analysis

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**Product Name:** OPC 21268

**Catalog No.:** 3924

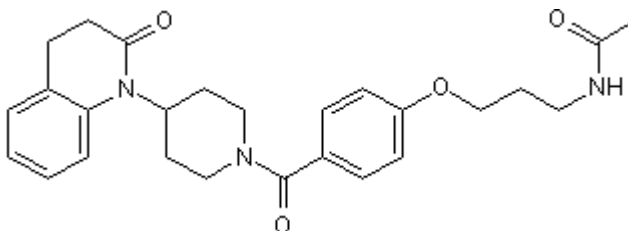
**Batch No.:** 1

CAS Number: 131631-89-5

IUPAC Name: *N*-[3-[4-[[4-(3,4-Dihydro-2-oxo-1(2*H*)quinolinyl)-1-piperidinyl]carbonyl]phenoxy]propyl]-acetamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>26</sub>H<sub>31</sub>N<sub>3</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 449.54  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 25 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.3 (Chloroform:Methanol [95:5])  
**HPLC:** Shows 98.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	69.47	6.95	9.35
Found	69.79	6.86	9.41

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

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**Description:**

Nonpeptide vasopressin V<sub>1</sub> receptor antagonist. Displays greater affinity for rat V<sub>1</sub> than human V<sub>1</sub> (K<sub>i</sub> values are 25 and 8800 nM respectively). Exhibits 1000-fold selectivity for V<sub>1</sub> receptors over V<sub>2</sub> receptors. Orally active.

**Physical and Chemical Properties:**

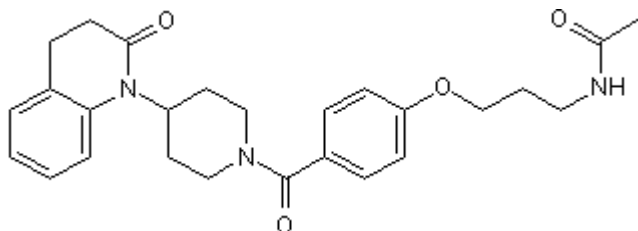
Batch Molecular Formula: C<sub>26</sub>H<sub>31</sub>N<sub>3</sub>O<sub>4</sub>

Batch Molecular Weight: 449.54

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 25 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:**

**Yamamura et al** (1991) OPC-21268, an orally effective, nonpeptide vasopressin V<sub>1</sub> receptor antagonist. *Science* **252** 572. PMID: 1850553.

**Imaizumi et al** (1992) Effects of OPC-21268, an orally effective vasopressin V<sub>1</sub> receptor antagonist in humans. *Hypertension* **20** 54. PMID: 1319959.

**Thibonnier et al** (2000) A molecular model of agonist and nonpeptide antagonist binding to the human V<sub>1</sub> vascular vasopressin receptor. *J.Pharmacol.Exp.Ther.* **294** 195. PMID: 10871312.

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