

# Certificate of Analysis

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**Product Name:** SDM25N hydrochloride

**Catalog No.:** 1410

**Batch No.:** 1

**CAS Number:** 342884-71-3

**IUPAC Name:** (4bS,8R,8aS,14bR)-5,6,7,8,14,14b-Hexahydro-7-(2-methyl-2-propenyl)-4,8-methanobenzofuro[2,3-a]pyrido[4,3-b]carbazole-1,8a(9H)-diol hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>26</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub>.HCl.H<sub>2</sub>O

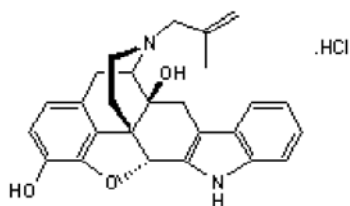
**Batch Molecular Weight:** 468.98

**Physical Appearance:** White solid

**Solubility:**  
water to 10 mM  
DMSO to 100 mM  
ethanol to 100 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.57 (Chloroform:Methanol:Ammonia soln. [9:1:0.1])

**Melting Point:** Greater than 200°C(dec)

**HPLC:** Shows >99.6% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	66.59	6.23	5.97
Found	66.8	6.12	5.95

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## Product Information

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### Description:

High affinity and highly selective non-peptide  $\delta$  receptor antagonist ( $K_i$  values are 4.7, 3800 and 7900 nM for  $\delta$ ,  $\kappa$  and  $\mu$  receptors respectively). More selective than naltrindole (Cat. No. 0740). Also inhibits Dengue virus replication.

### Physical and Chemical Properties:

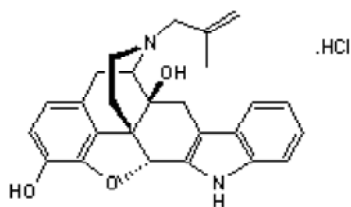
Batch Molecular Formula:  $C_{26}H_{26}N_2O_3 \cdot HCl \cdot H_2O$

Batch Molecular Weight: 468.98

Physical Appearance: White solid

**Minimum Purity:**  $\geq 99\%$

### Batch Molecular Structure:



**Storage:** Store at +4°C

### Solubility & Usage Info:

water to 10 mM  
DMSO to 100 mM  
ethanol to 100 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:

**Sprockholt et al** (2017) RIG-I-like receptor triggering by Dengue virus drives dendritic cell immune activation and  $T_H1$  differentiation. *J.Immunol.* PMID: 28507028.

**McLamore et al** (2001) Effect of *N*-alkyl and *N*-alkenyl substituents in noroxymorphindole, 17-substituted-6,7-dehydro-4,5 $\alpha$ -epoxy-3,14-dihydroxy-6,7:2',3'-indolomorphinans, on opioid receptor affinity, selectivity, and efficacy. *J.Med.Chem.* **44** 1471. PMID: 11311071.

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