

## Certificate of Analysis

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**Product Name:** Siguazodan

**Catalog No.:** 1148

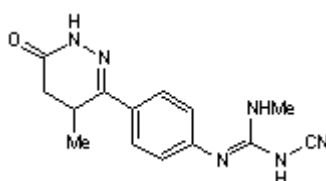
**Batch No.:** 1

CAS Number: 115344-47-3

IUPAC Name: *N*-Cyano-*N*'-methyl-*N*"-[4-(1,4,5,6-tetrahydro-4-methyl-6-oxo-3-pyridazinyl)phenyl]guanidine

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>14</sub>H<sub>16</sub>N<sub>6</sub>O  
**Batch Molecular Weight:** 284.32  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.32 (Dichloromethane:Methanol:Ammonia soln. [10:1:0.1])  
**Melting Point:** Between 239 - 242°C  
**HPLC:** Shows >99% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen		
Theoretical	59.14	5.67	29.56	0	0
Found	58.94	5.61	29.7	0	0

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**Description:**

Phosphodiesterase inhibitor, selective for PDE3 (IC<sub>50</sub> = 117 nM).

**Physical and Chemical Properties:**

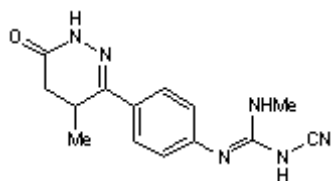
Batch Molecular Formula: C<sub>14</sub>H<sub>16</sub>N<sub>6</sub>O

Batch Molecular Weight: 284.32

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO 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:**

**Tang et al** (1994) Photoaffinity labelling of cyclic GMP-inhibited phosphodiesterase (PDE III) in human and rat platelets and rat tissues: effects of phosphodiesterase inhibitors. *Eur.J.Pharmacol.* **268** 105. PMID: 7925608.

**Christensen and Torphy** (1994) Isozyme-selective phosphodiesterase inhibitors as antiasthmatic agents. *Annu.Rep.Med.Chem.* **29** 185.

**Freitag et al** (1998) Phosphodiesterase inhibitors suppress α<sub>2</sub>-adrenoceptor-mediated 5-hydroxytryptamine release from trachea of newborn rabbits. *Eur.J.Pharmacol.* **354** 67. PMID: 9726632.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956