

**Product Name:** PSC 833

**Catalog No.:** 4042

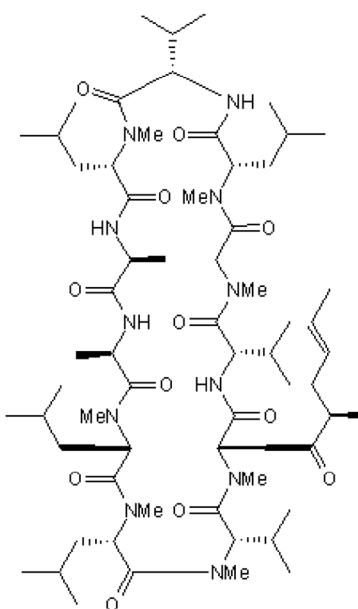
**Batch No.:** 3

CAS Number: 121584-18-7

IUPAC Name: 6-[(2*S*,4*R*,6*E*)-4-methyl-2-(methylamino)-3-oxo-6-octenoic acid]-7-*L*-valine-cyclosporin A

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>63</sub>H<sub>111</sub>N<sub>11</sub>O<sub>12</sub>  
**Batch Molecular Weight:** 1214.62  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 2 mg/ml  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 98.9% purity  
**Mass Spectrum:** Consistent with structure

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

**Product Name:** PSC 833

**Catalog No.:** 4042

**3**

CAS Number: 121584-18-7

IUPAC Name: 6-[(2S,4R,6E)-4-methyl-2-(methylamino)-3-oxo-6-octenoic acid]-7-L-valine-cyclosporin A

**Description:**

PSC 833 is a P-glycoprotein (P-gp) modulator; inhibits P-gp-mediated multidrug-resistance (MDR). Reverses resistance to several cytotoxic drugs including mitoxantrone and doxorubicin (resistance factors are 2.0 and 6.5 respectively) in human MDR cancer cell lines. Non-immunosuppressive analog of cyclosporin A (Cat. No. 1101).

**Physical and Chemical Properties:**

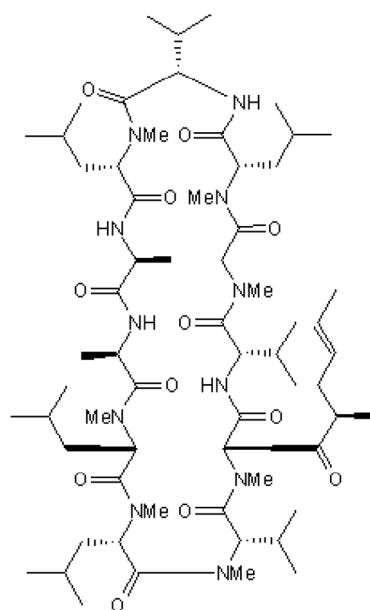
Batch Molecular Formula: C<sub>63</sub>H<sub>111</sub>N<sub>11</sub>O<sub>12</sub>

Batch Molecular Weight: 1214.62

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 2 mg/ml

This product is supplied in lyophilized form. It may appear as a solid, gel or film and be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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:**

**Shen et al** (2009) Dynamic assessment of mitoxan. resistance and modulation of multidrug resistance by Valspodar (PSC833) in multidrug resistance human cancer cells. *J.Pharmacol.Exp.Ther.* **330** 423. PMID: 19423841.

**Shen et al** (2008) Quantitation of doxorubicine uptake, efflux, and modulation of multidrug resistance (MDR) in MDR human cancer cells. *J.Pharmacol.Exp.Ther.* **324** 95. PMID: 17947497.

**Goda et al** (2007) Complete inhibition of P-glycoprotein by simultaneous treatment with a distinct class of modulators and the UIC2 monoclonal antibody. *J.Pharmacol.Exp.Ther.* **320** 81. PMID: 17050779.

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

**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