



Optical Rotation: $[\alpha]_{\text{D}} -244$ (CHCl_3). $[\alpha]_{\text{D}} -175$ (MeOH)

>>**Derivative:** 4-L-Leucine, 10-L-alanine analogue

CAS Registry Number: 186600-06-6

Molecular Formula: $\text{C}_{59}\text{H}_{105}\text{N}_{11}\text{O}_{13}$

Molecular Weight: 1176.544

Accurate Mass: 1175.789334

Percentage Composition: C 60.23%; H 8.99%; N 13.10%; O 17.68%

Biological Source: Prod. by *Acremonium luzulae*

Physical Description: Powder

Optical Rotation: $[\alpha]_{\text{D}} -234$ (CHCl_3). $[\alpha]_{\text{D}} -161$ (MeOH)

>>**Variant:** Cyclosporin D

Synonym(s): 7-L-Valinecyclosporin A, 9Cl

CAS Registry Number: 63775-96-2

Molecular Formula: $\text{C}_{63}\text{H}_{113}\text{N}_{11}\text{O}_{12}$

Molecular Weight: 1216.652

Accurate Mass: 1215.857019

Percentage Composition: C 62.19%; H 9.36%; N 12.66%; O 15.78%

Biological Source: Metab. of *Trichoderma inflatum*

Physical Description: Cryst. (Me_2CO at -15°)

Melting Point: Mp $148-151^\circ$

Optical Rotation: $[\alpha]_{\text{D}}^{20} -252$ (c, 0.52 in MeOH)

Solubility: Sol. MeOH, Et_2O , CHCl_3 , Me_2CO ; poorly sol. H_2O , C_6H_6 , hexane

>>**Derivative:** N^* -De-Me

Synonym(s): Cyclosporin I. 4-L-Leucine-7-L-valinecyclosporin A, 9Cl

CAS Registry Number: 83563-93-3

Molecular Formula: $\text{C}_{62}\text{H}_{111}\text{N}_{11}\text{O}_{12}$

Molecular Weight: 1202.625

Accurate Mass: 1201.841369

Percentage Composition: C 61.92%; H 9.30%; N 12.81%; O 15.96%

Biological Source: From *Trichoderma inflatum*

Physical Description: Amorph.

Melting Point: Mp $137-140^\circ$

Optical Rotation: $[\alpha]_{\text{D}}^{20} -220$ (c, 0.71 in CHCl_3)

Solubility: Sol. MeOH, EtOAc; poorly sol. H_2O , hexane

>>**Derivative:** Deoxy

Synonym(s): Amdray. Valspodar, BAN. PSC 833. SDZ PSC 833

CAS Registry Number: 121584-18-7

Molecular Formula: $\text{C}_{63}\text{H}_{113}\text{N}_{11}\text{O}_{11}$

Molecular Weight: 1200.653

Accurate Mass: 1199.862104

Percentage Composition: C 63.02%; H 9.49%; N 12.83%; O 14.66%

Biological Use/Importance: Antineoplastic agent. Semisynthetic cyclosporin showing strong ability to induce multidrug resistance coupled with absence of immunosuppressive props.Used in the treatment of ovarian cancer

>>**Derivative:** 7"-Hydroperoxide

Synonym(s): Cyclosporin D hydroperoxide

CAS Registry Number: 169211-04-5

Molecular Formula: $\text{C}_{63}\text{H}_{113}\text{N}_{11}\text{O}_{14}$

Molecular Weight: 1248.651

Accurate Mass: 1247.846849

Percentage Composition: C 60.60%; H 9.12%; N 12.34%; O 17.94%

Biological Source: Metab. of *Tolypocladium terricola*

Physical Description: Amorph.