

Institute of Microbial Chemistry (BIKAKEN)

5-001

PRODUCT DATA SHEET

Fluostatin A (sodium salt)

(Dipeptidyl Peptidase III (DPP-III) Inhibitor)



Specifications

Code No.	: 15403
CAS#	: Not applicable *
Parent CAS#	: 160219-74-9 (salt free form)
Molecular Formula	: C ₁₈ H ₉ O ₅ Na
Molecular Weight	: 328.225
Source	: Chemically synthesized from fluostatin B
Supplied as	: Powder, sodium salt
Purity	: >98 % (HPLC)
Long Term Storage	: at -20 °C
Solubility	: Soluble in H ₂ O, DMSO
	Poorly soluble in MeOH

* CAS number 160219-74-9 is the salt free form of fluostatin A. The fluostatin A we supply is the sodium salt form of which a CAS number has not been given yet.

The chemical structure was confirmed by NMR and HRMS.

Application Notes

Fluostatin A was initially isolated from the fermentation broth of *Streptomyces* sp. TA-3391.¹⁾ As the productivity of fluostatin A by this strain was too low for the preparation, fluostatin A was prepared from fluostatin B by chemical dehydration and oxidation. Fluostatin A is a selective human placental dipeptidyl peptidase III (DPP-III) inhibitor (IC_{50} value is 0.44 µg/mL).¹⁾ It exhibits no toxicity after intraperitoneal injection in mice at a dose of 100 mg/kg.¹⁾

References

 Fluostatins A and B, new inhibitors of dipeptidyl peptidase III, produced by *Streptomyces* sp. TA-3391. I. Taxonomy of producing strain, production, isolation, physico-chemical properties and biological properties. Akiyama T, *et al. J Antibiot.* 1998 **51**(6) 553-559.

2) Fluostatins A and B, new inhibitors of dipeptidyl peptidase III, produced by *Streptomyces* sp. TA-3391. II. Structure determination. Akiyama T, *et al. J Antibiot*. 1998 **51**(6) 586-588.