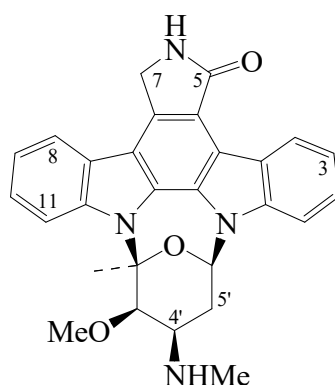




>>Entry Name: Staurosporine

Synonym(s): AM 2282. M 193. Antibiotic AM 2282. Antibiotic M 193



Absolute
Configuration

CAS Registry Number: 62996-74-1

Related CAS Registry Numbers(s): 125035-83-8

Molecular Formula: $C_{28}H_{26}N_4O_3$

Molecular Weight: 466.538

Accurate Mass: 466.200491

Percentage Composition: C 72.09%; H 5.62%; N 12.01%; O 10.29%

Biological Source: Alkaloid from *Streptomyces staurosporeus* and *Streptomyces* sp. M 193

Use/Importance: Active against fungi and yeasts. Possesses high hypotensive activity and is a potent platelet aggregation inhibitor

Physical Description: Pale yellow plates

Melting Point: Mp 270 dec.°

Optical Rotation: $[\alpha]_D^{25} +35$ (c, 1 in MeOH)

Solubility: BERDY SOL: Sol. Py; fairly sol. $CHCl_3$, MeOH; poorly sol. butanol, C_6H_6 , Me_2CO -EtOAc, hexane

UV: [neutral] λ_{max} 207 (ϵ 25000); 243 (ϵ 25000); 267 (sh) (ϵ 31800); 292 (ϵ 57200); 322 (sh) (ϵ 14200); 335 (ϵ 14600); 356 (ϵ 10300); 372 (ϵ 11400) (MeOH) (Derep)

[neutral] λ_{max} 243 (E1%/1cm 537); 292 (E1%/1cm 1228); 335 (E1%/1cm 313); 356 (E1%/1cm 220); 372 (E1%/1cm 256) (MeOH) (Berdy) [neutral] λ_{max} 243 (E1%/1cm 528); 292 (E1%/1cm 1180); 335 (E1%/1cm 271); 356 (E1%/1cm 195); 372 (E1%/1cm 215) (EtOH) (Berdy)

Hazard & Toxicity: LD₅₀ (mus, ipr) 6.6 mg/kg (as hydrochloride) ; BERDY HAZD : LD₅₀ (mus, ipr) 6.6 mg/kg

Fluka: 85660

Sigma: S9520

>>Derivative: 4'-N-Formyl

Synonym(s): N-Formylstaurosporine

CAS Registry Number: 161973-03-1

Molecular Formula: $C_{29}H_{26}N_4O_4$

Molecular Weight: 494.549

Accurate Mass: 494.195406

Percentage Composition: C 70.43%; H 5.30%; N 11.33%; O 12.94%

Biological Source: From *Streptomyces longisporoflavus*

Physical Description: Cryst. (EtOAc/ CH_2Cl_2)

Melting Point: Mp 221-226°

>>Derivative: 4'-N-Ac

CAS Registry Number: 120685-33-8

Molecular Formula: $C_{30}H_{28}N_4O_4$

Molecular Weight: 508.576

Accurate Mass: 508.211056

Percentage Composition: C 70.85%; H 5.55%; N 11.02%; O 12.58%

Biological Source: Prod. by *Saccharothrix aerocolonigenes copiosa*

Biological Use/Importance: Protein kinase C inhibitor

Physical Description: Yellow powder

UV: [neutral] λ_{max} 206 (ϵ 34000); 243 (ϵ 22000); 292 (ϵ 49000); 320 (ϵ 9000); 334 (ϵ 12000); 355 (ϵ 8000); 372 (ϵ 9000) (MeOH) [neutral] λ_{max} 206 (ϵ 34000); 243 (ϵ 22000); 292 (ϵ 49000); 320 (ϵ 9000); 334 (ϵ 12000); 355 (ϵ 8000); 372 (ϵ 9000) (MeOH) (Berdy)