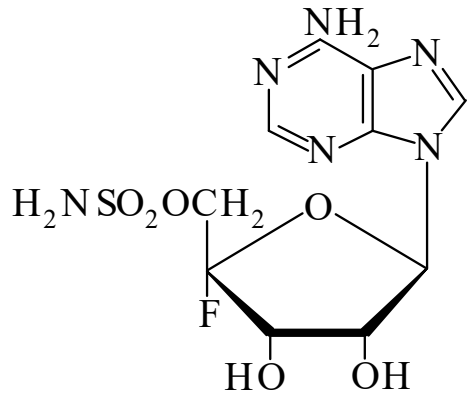
>>**Entry Name: Nucleocidin**

Synonym(s): 4'-*C*-Fluoroadenosine 5'-sulfamate, 9Cl, 8Cl. T 3018. Antibiotic T 3018



CAS Registry Number: 24751-69-7

Molecular Formula: $C_{10}H_{13}FN_6O_6S$
Molecular Weight: 364.314
Accurate Mass: 364.060132
Percentage Composition: C 32.97%; H 3.60%; F 5.21%; N 23.07%; O 26.35%; S 8.80%

Biological Source: Produced by *Streptomyces calvus*
Biological Use/Importance: Antitrypanosomal which inhibits protein synth.
Physical Description: Cryst. + $1H_2O$ (H_2O)
Melting Point: Mp 190 dec.°
Optical Rotation: $[\alpha]_D^{24}$ -33.3 (c, 1.05 in EtOH/HCl)
Solubility: Sol. acids, Me_2CO, bases, MeOH, EtOH; fairly sol. H_2O; poorly sol. butanol, hexane, EtOAc
UV: [acid] λ_{max} 257 (ε 15000) (0.1*N* HCl) (Derep) [base] λ_{max} 259 (ε 16000) (0.1*N* NaOH) (Derep) [neutral] λ_{max} 258 (ε 15500) (H_2O) (Derep) [neutral] λ_{max} 256 (E1%/1cm 392) (H_2O) (Berdy) [acid] λ_{max} 256 (E1%/1cm 392) (HCl) (Berdy) [base] λ_{max} 259 (E1%/1cm 406) (NAOH) (Berdy)
Other Data: Recent attempts (1993) at isol. from *S. calvus* have been unsuccessful
Hazard & Toxicity: LD_{50} (mus, ipr) .2 mg/kg , LD_{50} (mus, orl) 2 mg/kg

>>**Derivative:** Picrate

Melting Point: Mp 145-147°

References:

Thomas, S.O. *et al.*, *Antibiot. Annu.*, 1956, 716-721, *(isol)*
Waller, C.W. *et al.*, *J.A.C.S.*, 1957, **79**, 1011-1012, *(struct)*
Morton, G.O. *et al.*, *J.A.C.S.*, 1969, **91**, 1535-1537, *(struct, ms, nmr)*
Jenkins, I.D. *et al.*, *J.A.C.S.*, 1971, **93**, 4323-4324; 1976, **98**, 3346-3357, *(synth, ir, uv, nmr)*
Maguire, A.R. *et al.*, *J.C.S. Perkin 1*, 1993, 1795-1808, *(synth)*