Biological Source: Isol. from *Micromonospora* sp. nov.
Biological Use/Importance: Antibacterial and cytotoxic agent
Melting Point: Mp 163-164 dec.° (as hydrochloride)
Optical Rotation: $[\alpha]_D^{23}$+107 (c, 0.2 in MeOH)
Solubility: BERDY SOL: Sol. MeOH, AcOH, acids, Py, $CHCl_3$; poorly sol. Et_2O, hexane, H_2O
UV: [neutral] λ_{max} 228 (E1%/1cm 640); 260 (E1%/1cm 410); 418 (E1%/1cm 179) (MeOH) (Berdy) [neutral] λ_{max} 235 (E1%/1cm 605); 262 (E1%/1cm 400); 426 (E1%/1cm 160) (pH 7 buffer) (Berdy) [base] λ_{max} 510 (E1%/1cm 118) (NAOH) (Berdy)

>>**Derivative:** 11-Deoxy, 13-deoxo
Synonym(s): 11-Deoxy-13-deoxodaunorubicin

CAS Registry Number: 71800-92-5
Extra CAS Registry Numbers(s): 73890-45-6

Molecular Formula: $C_{27}H_{31}NO_8$
Molecular Weight: 497.544
Accurate Mass: 497.204969
Percentage Composition: C 65.18%; H 6.28%; N 2.82%; O 25.73%
Biological Source: Isol. from *Micromonospora* sp. nov.
Biological Use/Importance: Antibacterial and cytotoxic agent
Melting Point: Mp 140-150 dec.° (as hydrochloride)
Optical Rotation: $[\alpha]_D^{23}$+122 (c, 0.2 in MeOH)
Solubility: BERDY SOL: Sol. MeOH, AcOH, Py, acids, $CHCl_3$; poorly sol. Et_2O, hexane, H_2O
UV: [neutral] λ_{max} 228 (E1%/1cm 610); 260 (E1%/1cm 395); 418 (E1%/1cm 171) (MeOH) (Berdy) [neutral] λ_{max} 235 (E1%/1cm 550); 262 (E1%/1cm 400); 426 (E1%/1cm 140) (pH 7 buffer) (Berdy)

>>**Derivative:** 8-Deoxy, 7,8-didehydro
Synonym(s): 9,10-Anhydrodaunomycin. 9,10-Anhydrodaunorubicin. D 788-13. Antibiotic D 788-13

Molecular Formula: $C_{27}H_{27}NO_9$
Molecular Weight: 509.512
Accurate Mass: 509.168584
Percentage Composition: C 63.65%; H 5.34%; N 2.75%; O 28.26%
Biological Source: Prod. by *Streptomyces* sp. D788
Physical Description: Red-brown powder
Melting Point: Mp 155-160 dec.°
Optical Rotation: $[\alpha]_D$ +258 (c, 0.01 in $CHCl_3$)
Solubility: BERDY SOL: Sol. MeOH, $CHCl_3$; poorly sol. H_2O, hexane
UV: [neutral] λ_{max} 234 (E1%/1cm 813); 254 (E1%/1cm 461); 293 (E1%/1cm 160); 492 (E1%/1cm 293) (MeOH) (Berdy)

>>**Derivative:** Aglycone
Synonym(s): 8-Acetyl-7,8,9,10-tetrahydro-6,8,10,11-tetrahydroxy-1-methoxy-5,12-naphthacenedione, 9Cl, 8Cl. Daunomycinone. Daunorubicinone. Leukaemomycinone

CAS Registry Number: 21794-55-8
Molecular Formula: $C_{21}H_{18}O_8$
Molecular Weight: 398.368
Accurate Mass: 398.10017
Percentage Composition: C 63.32%; H 4.55%; O 32.13%
Melting Point: Mp 213-214°
Optical Rotation: $[\alpha]_D^{20}$+193 (c, 0.1 in dioxan)

>>**Derivative:** Aglycone, tetra-Ac

CAS Registry Number: 32384-96-6
Molecular Formula: $C_{29}H_{26}O_{12}$
Molecular Weight: 566.517
Accurate Mass: 566.14243
Percentage Composition: C 61.48%; H 4.63%; O 33.89%
Melting Point: Mp 225°