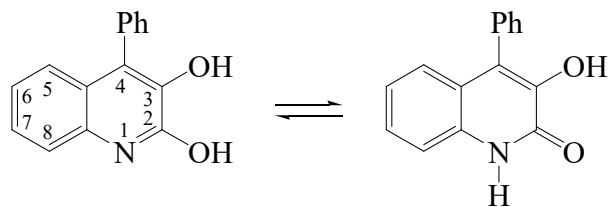




>>Entry Name: **2,3-Dihydroxy-4-phenylquinoline**

Synonym(s): 3-Hydroxy-4-phenyl-2(1*H*)-quinolinone. Viridicatin



CAS Registry Number: 129-24-8

Type of Compound Code(s): VX1480 XA1200

Molecular Formula: C₁₅H₁₁NO₂

Molecular Weight: 237.257

Accurate Mass: 237.078979

Percentage Composition: C 75.94%; H 4.67%; N 5.90%; O 13.49%

Biological Source: Isol. from *Penicillium viridicatum* and *Penicillium cyclopium*

Use/Importance: Active against *Mycobacterium tuberculosis* at dilution 1:15,000

Physical Description: Needles (MeOH)

Melting Point: Mp 268°

Solubility: BERDY SOL: Sol. bases; fairly sol. acids, MeOH, Et₂O; poorly sol. H₂O

UV: [neutral] λ_{max} 224 (ε 37400); 240 (ε 18000); 298 (ε 7100); 310 (ε 7000); 320 (ε 9600); 332 (ε 8200) (EtOH) (Berdy) [base] λ_{max} 228 (ε 28400); 253 (ε 16400); 295 (ε 7400); 334 (ε 12100); 344 (ε 13700) (EtOH-NaOH) (Berdy) [base] λ_{max} 229 (ε 24000); 254 (ε 19000); 342 (ε 12800) (NaOH) (Berdy)

>>Derivative: Ac

Molecular Formula: C₁₇H₁₃NO₃

Molecular Weight: 279.295

Accurate Mass: 279.089544

Percentage Composition: C 73.11%; H 4.69%; N 5.02%; O 17.19%

Physical Description: Prisms (EtOH aq.)

Melting Point: Mp 200-201°

>>Derivative: Me ether

Synonym(s): 3-Methoxy-4-phenyl-2(1*H*)-quinolinone. **O-Methylviridicatin**

Type of Compound Code(s): VX1480

Molecular Formula: C₁₆H₁₃NO₂

Molecular Weight: 251.284

Accurate Mass: 251.094629

Percentage Composition: C 76.48%; H 5.21%; N 5.57%; O 12.73%

Biological Source: Metab. of *Penicillium puberulum*

Physical Description: Prisms (MeOH)

Melting Point: Mp 248-249°

>>Derivative: 3'-Hydroxy

Synonym(s): 3-Hydroxy-4-(3-hydroxyphenyl)-2(1*H*)-quinolinone, 9Cl. **Viridicatol**

Type of Compound Code(s): VX1480

Molecular Formula: C₁₅H₁₁NO₃

Molecular Weight: 253.257

Accurate Mass: 253.073894

Percentage Composition: C 71.14%; H 4.38%; N 5.53%; O 18.95%

Biological Source: From *Penicillium viridicatum*

Physical Description: Cryst. (EtOAc)

Melting Point: Mp 280°

UV: [neutral] λ_{max} 226 (); 284 (); 316 (); 329 () (MeOH) (Berdy)

References:

- Cunningham, K.G. *et al.*, *Biochem. J.*, 1953, **53**, 328
Eistert, B. *et al.*, *Z. Naturforsch., B*, 1962, **17**, 202, (*synth*)
Birkinshaw, J.H. *et al.*, *Biochem. J.*, 1963, **89**, 196, (*deriv*)
Luckner, M. *et al.*, *Tet. Lett.*, 1964, 1987, (*deriv*)
Rapoport, H. *et al.*, *J.A.C.S.*, 1969, **91**, 6083
McCamish, M. *et al.*, *Org. Mass Spectrom.*, 1970, **4**, 241, (*ms*)
Wilson, B.J., *Microb. Toxins*, (Lieglér, A. *et al* Eds.), *VI*, Academic Press, 1971, 510, (*rev*)
Cole, R.J. *et al.*, *Handbook of Toxic Fungal Metabolites*, Academic Press, New York, 1981, 834