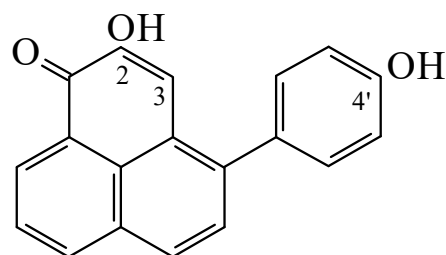




>>Entry Name: 2-Hydroxy-4-(4-hydroxyphenyl)-1*H*-phenalen-1-one

Synonym(s): Irenolone



CAS Registry Number: 149184-19-0

Molecular Formula: C₁₉H₁₂O₃

Molecular Weight: 288.302

Accurate Mass: 288.078645

Percentage Composition: C 79.16%; H 4.20%; O 16.65%

Biological Source: Isol. from *Musa paradisiaca*

Biological Use/Importance: Phytoalexin

Physical Description: Red needles (CHCl₃/MeOH)

Melting Point: Mp 285°

UV: [neutral] λ_{max} 225 (sh) (ε 12600); 271 (ε 15800); 325 (ε 6310); 350 (ε 7940); 390 (ε 3980) (MeOH) (Derep) [base] λ_{max} (solvent not reported) (Derep) [neutral] λ_{max} 271 (ε 15900); 325 (ε 6350); 350 (ε 3000); 390 (ε 4000) (MeOH) (Berdy)

>>Derivative: 4'-Me ether

Synonym(s): 2-Hydroxy-4-(4-methoxyphenyl)-1*H*-phenalen-1-one

CAS Registry Number: 159853-36-8

Molecular Formula: C₂₀H₁₄O₃

Molecular Weight: 302.329

Accurate Mass: 302.094295

Percentage Composition: C 79.46%; H 4.67%; O 15.88%

Biological Source: Constit. of the rhizomes of *Musa acuminata*

Biological Use/Importance: Phytoalexin

Physical Description: Bright red needles

Melting Point: Mp 222-223°

UV: [neutral] λ_{max} 272 (); 313 (); 337 (); 388 () (EtOH) (Berdy)

>>Derivative: 4'-Deoxy

Synonym(s): 2-Hydroxy-4-phenyl-1*H*-phenalen-1-one. 4'-Deoxyirenenolone

Molecular Formula: C₁₉H₁₂O₂

Molecular Weight: 272.303

Accurate Mass: 272.08373

Percentage Composition: C 83.81%; H 4.44%; O 11.75%

Biological Source: Constit. of *Musa* sp. selected hybrid cultivar SH-3481

Biological Use/Importance: Phytoanticipin

Physical Description: Red solid

UV: [neutral] λ_{max} 232 (); 236 (); 262 (); 275 () (EtOH)

>>Derivative: 3-Methoxy, 2-Me ether

Synonym(s): 2,3-Dimethoxy-4-(4-hydroxyphenyl)-1*H*-phenalen-1-one

Molecular Formula: C₂₁H₁₆O₄

Molecular Weight: 332.355

Accurate Mass: 332.10486

Percentage Composition: C 75.89%; H 4.85%; O 19.26%

Biological Source: Constit. of *Anigozanthos preissii*

Physical Description: Yellow cryst. (CH₂Cl₂)

Melting Point: Mp 184-186°

UV: [neutral] λ_{max} 243 (); 342 (); 362 () (MeOH)

References: