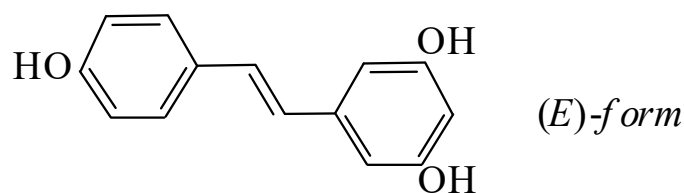




>>Entry Name: 1-(3,5-Dihydroxyphenyl)-2-(4-hydroxyphenyl)ethylene

ENTRY UNDER REVIEW

Synonym(s): 5-[2-(4-Hydroxyphenyl)ethenyl]-1,3-benzenediol, 9Cl. 3,4',5-Stilbenetriol, 8Cl. 3,4',5-Trihydroxystilbene. **Resveratrol**



Related CAS Registry Numbers(s): 33626-08-3 54443-64-0

Extra CAS Registry Numbers(s): 36469-58-6

Molecular Formula: C₁₄H₁₂O₃

Molecular Weight: 228.247

Accurate Mass: 228.078645

Percentage Composition: C 73.67%; H 5.30%; O 21.03%

Solubility: BERDY SOL: Sol. EtOH, Me₂CO; poorly sol. H₂O

UV: [neutral] λ_{max} 210 (); 370 () (EtOH) (Berdy) [base] λ_{max} 211 (); 347 () (EtOH-NaOH) (Berdy)

>>Variant: (E)-form

CAS Registry Number: 501-36-0

Type of Compound Code(s): VG4000

Molecular Formula: C₁₄H₁₂O₃

Molecular Weight: 228.247

Accurate Mass: 228.078645

Percentage Composition: C 73.67%; H 5.30%; O 21.03%

Biological Source: Phytoalexin from *Veratrum grandiflorum* (roots), *Pinus sibirica* (bark), *Vitis vinifera* and *Arachis hypogaea*. Also from *Eucalyptus*, *Polygonum* and *Nothofagus* spp. and *Cudrania javanensis*

Biological Use/Importance: Fungicide, bactericide. Resveratrol in red wines has been postulated to be associated with beneficial health effects. Shows Tyrosinase inhibitory activity

Physical Description: Cryst. (MeOH aq.)

Melting Point: Mp 265-267°

UV: [neutral] λ_{max} 218 (ε 21400); 227 (sh) (ε 14800); 307 (ε 27500); 320 (ε 26900) (EtOH)

Sigma: R5010

>>Derivative: 3-O-β-D-Xylopyranoside

Synonym(s): Resveratrol 3-xyloside

Type of Compound Code(s): VG4000

Molecular Formula: C₁₉H₂₀O₇

Molecular Weight: 360.363

Accurate Mass: 360.120905

Percentage Composition: C 63.33%; H 5.59%; O 31.08%

Biological Source: Constit. of the bark of *Holodiscus discolor*

Physical Description: Powder

Optical Rotation: [α]_D²⁹ -7.4 (c, 2.1 in MeOH)

>>Derivative: 3-O-β-D-Glucopyranoside

Synonym(s): Piceid. Polydatin

CAS Registry Number: 27208-80-6

Type of Compound Code(s): VG4000

Molecular Formula: C₂₀H₂₂O₈

Molecular Weight: 390.389

Accurate Mass: 390.13147

Percentage Composition: C 61.53%; H 5.68%; O 32.79%

Biological Source: Isol. from *Picea* spp., *Pinus sibirica*, *Polygonum cuspidatum* and *Eucalyptus* spp.

Physical Description: Pale yellow needles

Melting Point: Mp 130-140° (resolidifies at 170°, remelts at 228-230°)

Optical Rotation: [α]_D¹⁹ -65.26 (c, 0.19 in MeOH)

UV: [acid] λ_{max} 211 (ε 17000); 304 (ε 17800); 315 (ε 14800) (isomeric form recorded) (Derep) [neutral] λ_{max} 217 (ε 2000); 306 (ε 16200); 314 (ε 13200); 320 (ε 13800) (EtOH) (Derep)