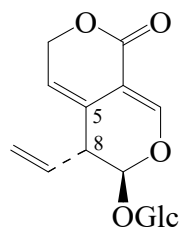




>>Entry Name: Gentiopicroside

Synonym(s): 5-Ethenyl-6-(β -D-glucopyranosyloxy)-5,6-dihydro-1*H*,3*H*-pyrano[3,4-*c*]pyran-1-one, 9Cl. Gentiopicrin



CAS Registry Number: 20831-76-9

Molecular Formula: $C_{16}H_{20}O_9$

Molecular Weight: 356.329

Accurate Mass: 356.110735

Percentage Composition: C 53.93%; H 5.66%; O 40.41%

Biological Source: Widespread in the Gentianaceae, eg. *Swertia* and *Gentiana* spp.

Use/Importance: Antimalarial agent. Shows larvicidal props.

Physical Description: Cryst. (EtOH or EtOAc)

Melting Point: Mp 191° (anhyd.)

Optical Rotation: $[\alpha]_D -196.3$ (H₂O). $[\alpha]_D^{20} -199$

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

Calculated Log P Data: Log P -3.34 (uncertain value) (calc)

UV: [neutral] λ_{max} 270 (ϵ 9700) (MeOH) (Berdy)

Other Data: The nat. prods. Erytaurin, Gentiamarin and Sabbatin were said to be identical with Gentiopicroside (Korte, 1954-55). However this work is unreliable (Tomita 1960)

>>Derivative: Hemihydrate

CAS Registry Number: 96998-15-1

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 121°

>>Derivative: Tetra-Ac

CAS Registry Number: 17388-41-9

Molecular Formula: $C_{24}H_{28}O_{13}$

Molecular Weight: 524.477

Accurate Mass: 524.152995

Percentage Composition: C 54.96%; H 5.38%; O 39.66%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 138.5-139.5°

>>Derivative: 2'-(4-Hydroxycinnamoyl)(*E*-)

Synonym(s): Olivieroside A

CAS Registry Number: 249294-77-7

Molecular Formula: $C_{25}H_{26}O_{11}$

Molecular Weight: 502.474

Accurate Mass: 502.147515

Percentage Composition: C 59.76%; H 5.22%; O 35.03%

Biological Source: Constit. of *Gentiana olivieri*

Physical Description: Amorph. powder

Optical Rotation: $[\alpha]_D^{23} -224$ (c, 1.05 in MeOH)

UV: [neutral] λ_{max} 233 (log ϵ 3.95); 315 (log ϵ 4.2) (MeOH)

>>Derivative: 3'-*O*- β -D-Glucopyranosyl

Synonym(s): Olivieroside C

CAS Registry Number: 249294-86-8

Molecular Formula: $C_{22}H_{30}O_{14}$

Molecular Weight: 518.471

Accurate Mass: 518.16356

Percentage Composition: C 50.97%; H 5.83%; O 43.20%

Biological Source: Constit. of *Gentiana olivieri*

Physical Description: Amorph. powder