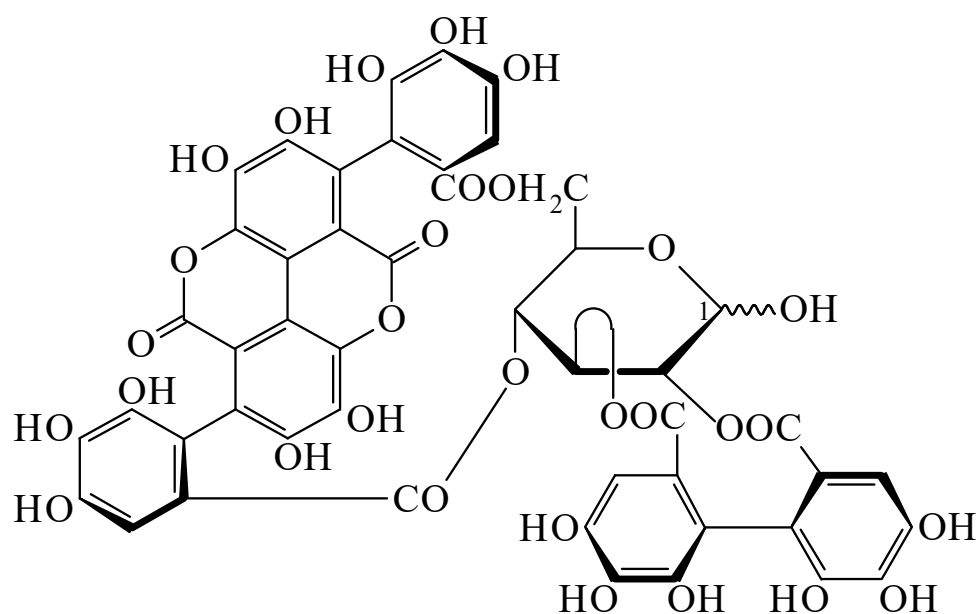




>>Entry Name: Punicalagin

Synonym(s): 2,3-(*S*)-Hexahydroxydiphenoyl-4,6-(*S,S*)-gallagylglucose



CAS Registry Number: 65995-63-3

Molecular Formula: $C_{48}H_{28}O_{30}$

Molecular Weight: 1084.731

Accurate Mass: 1084.06655

Percentage Composition: C 53.15%; H 2.60%; O 44.25%

Biological Source: Constit. of *Terminalia oblongata* and *Punica granatum*

Use/Importance: Shows anti-HIV activity. Toxic to sheep and cattle

Physical Description: Yellow amorph. powder + 1H₂O

Optical Rotation: $[\alpha]_D^{20} -181$ (c, 1.0 in H₂O). $[\alpha]_D^{28} +3.8$ (c, 0.9 in MeOH)

UV: [neutral] λ_{max} 217 (ϵ 60000); 261 (ϵ 55000); 375 (ϵ 12200) (MeOH) (Berdy)

>>Derivative: Heptadeca-Me ether

Physical Description: Prisms (MeOH)

Melting Point: Mp 289-191°

Optical Rotation: $[\alpha]_D^{20} -174$ (c, 1 in Me₂CO)

>>Derivative: 1-*O*-(3,4,5-Trihydroxybenzoyl)(1 α -)

Synonym(s): 1 α -*O*-Galloylpunicalagin. **Teroblongin**. Combreglutinin

CAS Registry Number: 108906-54-3

Molecular Formula: $C_{55}H_{32}O_{34}$

Molecular Weight: 1236.837

Accurate Mass: 1236.07751

Percentage Composition: C 53.41%; H 2.61%; O 43.98%

Biological Source: Constit. of *Terminalia calamansanai*. Also from *Combretum glutinosum*

Physical Description: Amorph. brown powder

Optical Rotation: $[\alpha]_D^{20} -60$ (c, 0.3 in MeOH)

UV: [neutral] λ_{max} 217 (ϵ 77624); 260 (ϵ 66070); 379 (ϵ 10232) (MeOH) (Berdy)

References:

- Mayer, W. *et al.*, *Annalen*, 1977, 1976, (*isol*)
Tanaka, T. *et al.*, *Chem. Pharm. Bull.*, 1986, **34**, 650, (*isol*)
Liu, T. *et al.*, *Chem. Pharm. Bull.*, 1990, **38**, 3004, (*isol*)
Nonaka, G.-I., *J. Nat. Prod.*, 1990, **53**, 587, (*anti-HIV activity*)
Doig, A.J. *et al.*, *J.C.S. Perkin I*, 1990, 2317, (*isol*, *pmr*, *cmr*, *ms*)
Tanaka, T. *et al.*, *Chem. Pharm. Bull.*, 1991, **39**, 60, (*Teroblongin*)
Jossang, A. *et al.*, *J. Nat. Prod.*, 1994, **57**, 732, (*isol*, *pmr*, *cmr*)