



Accurate Mass: 882.16435
Percentage Composition: C 59.87%; H 3.88%; O 36.25%
Biological Source: Isol. from *Polygonum multiflorum*, *Rheum* rhizome and *Thea sinensis*
Physical Description: Pale brown amorph. powder + 1½H₂O
Optical Rotation: $[\alpha]_D^{22} -95.2$ (c, 1.1 in Me₂CO)

>>**Variant:** (2*R*,2'*R*,3*R*,3'*S*,4*R*)-form

Synonym(s): Procyanidin B₁. Epicatechin(4β→8)catechin. Proanthocyanidin B₁

CAS Registry Number: 20315-25-7

Molecular Formula: C₃₀H₂₆O₁₂
Molecular Weight: 578.528
Accurate Mass: 578.14243
Percentage Composition: C 62.28%; H 4.53%; O 33.19%
Biological Source: Present in red wine
Physical Description: Cryst. (MeOH) (as deca-Ac)
Melting Point: Mp 231-232° (deca-Ac)
Optical Rotation: $[\alpha]_D^{25} +110.9$ (c, 2 in Me₂CO) (deca-Ac)

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

Synonym(s): 3-Galloylprocyanidin B₁

Molecular Formula: C₃₇H₃₀O₁₆
Molecular Weight: 730.634
Accurate Mass: 730.15339
Percentage Composition: C 60.82%; H 4.14%; O 35.04%
Biological Source: Isol. from *Polygonum multiflorum* and *Rheum rhizome*
Optical Rotation: $[\alpha]_D^{21} -21$ (Me₂CO)

>>**Derivative:** 3'-(1-Hydroxy-6-oxo-2-cyclohexene-1-carboxylate)

Molecular Formula: C₃₇H₃₂O₁₅
Molecular Weight: 716.651
Accurate Mass: 716.174125
Percentage Composition: C 62.01%; H 4.50%; O 33.49%
Biological Source: Isol. from *Salix sieboldiana*
Physical Description: Off-white amorph. powder + 2H₂O
Optical Rotation: $[\alpha]_D^{18} -62.6$ (c, 1 in Me₂CO)

>>**Derivative:** 3'-*O*-(4-Hydroxybenzoyl)

Synonym(s): 3'-(4-Hydroxybenzoyl)procyanidin B₁

Molecular Formula: C₃₇H₃₀O₁₄
Molecular Weight: 698.636
Accurate Mass: 698.16356
Percentage Composition: C 63.61%; H 4.33%; O 32.06%
Biological Source: Constit. of *Hamamelis virginiana* (Hamamelidaceae)

>>**Variant:** (2*R*,2'*R*,3*S*,3'*S*,4*S*)-form

Synonym(s): Procyanidin B₃. Catechin(4α→8)catechin. Proanthocyanidin B₃

CAS Registry Number: 23567-23-9

Molecular Formula: C₃₀H₂₆O₁₂
Molecular Weight: 578.528
Accurate Mass: 578.14243
Percentage Composition: C 62.28%; H 4.53%; O 33.19%
Biological Source: Occurs in *Salix caprea* and *Fragaria* spp. Present in red wine
Physical Description: Amorph. (as deca-Ac)
Optical Rotation: $[\alpha]_D -235$ (MeOH aq.)
Sigma: P1066