



Biological Source: Constit. of the stem bark of *Symplocos racemosa* and the hairy root cultures of *Lobelia sessilifolia*

Use/Importance: Antifibrinolytic agent

Physical Description: Flat needles (EtOAc/MeOH)

Melting Point: Mp 192-195°

Optical Rotation: $[\alpha]_{\text{D}}^{25} -102$ (c, 0.2 in MeOH). $[\alpha]_{\text{D}}^{20} -58.6$

UV: [neutral] λ_{max} 230 (); 275 () (MeOH)

>> **Derivative:** 3-*O*-β-D-Allopyranoside

Synonym(s): Propinqualin

CAS Registry Number: 147511-60-2

Molecular Formula: C₂₁H₂₄O₁₀

Molecular Weight: 436.415

Accurate Mass: 436.13695

Percentage Composition: C 57.80%; H 5.54%; O 36.66%

Biological Source: Constit. of *Drynaria propinqua* rhizomes

Physical Description: Cryst. + 1H₂O (MeOH)

Melting Point: Mp 172-174°

Optical Rotation: $[\alpha]_{\text{D}}^{25} -23.6$ (c, 0.04 in MeOH)

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

Synonym(s): 3-Galloyl(-)-epiafzelechin. (-)-Epiafzelechin 3-gallate

CAS Registry Number: 108907-43-3

Molecular Formula: C₂₂H₁₈O₉

Molecular Weight: 426.379

Accurate Mass: 426.095085

Percentage Composition: C 61.97%; H 4.25%; O 33.77%

Biological Source: Isol. from *Camellia sinensis* var. *assamica* (oolong tea)

Physical Description: Off-white powder + 1H₂O

Optical Rotation: $[\alpha]_{\text{D}}^{21} -181.7$ (c, 0.9 in Me₂CO)

>> **Derivative:** 4',5,7-Tri-Me ether

Physical Description: Prisms (MeOH)

Melting Point: Mp 110°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -67.4$ (c, 2 in EtOH)

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

Synonym(s): Afzelechin

CAS Registry Number: 2545-00-8

Molecular Formula: C₁₅H₁₄O₅

Molecular Weight: 274.273

Accurate Mass: 274.084125

Percentage Composition: C 65.69%; H 5.14%; O 29.17%

Biological Source: Found in *Cochlospermum gillivraei*, *Desmoncus polycanthos*, *Eucalyptus calophylla*, etc.

Melting Point: Mp 221-222 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +20.6$ (5% Me₂CO aq.)

>> **Derivative:** 7-*O*-β-D-Apiofuranoside

CAS Registry Number: 114590-44-2

Molecular Formula: C₂₀H₂₂O₉

Molecular Weight: 406.388

Accurate Mass: 406.126385

Percentage Composition: C 59.11%; H 5.46%; O 35.43%

Biological Source: Constit. of rhizomes of *Polypodium glycyrrhiza*

Physical Description: Powder (CHCl₃)

Melting Point: Mp 135-137°

Optical Rotation: $[\alpha]_{\text{D}} -93.3$ (c, 0.12 in MeOH)

UV: [neutral] λ_{max} 224 (sh) (ε 58900); 274 (ε 11500) (MeOH) (Derep)