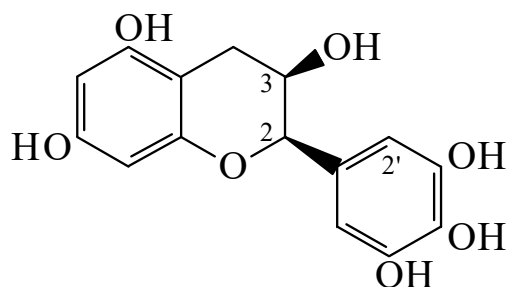




>>Entry Name: 3,3',4',5,5',7-Hexahydroxyflavan

ENTRY UNDER REVIEW

Synonym(s): 3,4-Dihydro-2-(3,4,5-trihydroxyphenyl)-2*H*-1-benzopyran-3,5,7-triol, 9CI



(2*R*,3*R*)-form

CAS Registry Number: 13425-13-3

Molecular Formula: C₁₅H₁₄O₇

Molecular Weight: 306.271

Accurate Mass: 306.073955

Percentage Composition: C 58.83%; H 4.61%; O 36.57%

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

Synonym(s): (–)-*cis*-form. **Epigallocatechin**. Epigallocatechol. Antiscurvy factor C₂. Teacatechin II

CAS Registry Number: 970-74-1

Molecular Formula: C₁₅H₁₄O₇

Molecular Weight: 306.271

Accurate Mass: 306.073955

Percentage Composition: C 58.83%; H 4.61%; O 36.57%

Biological Source: Widespread in plants; present in green tea

Use/Importance: Possesses antiscorbutic props. Antioxidant

Physical Description: Cryst. (H₂O)

Melting Point: Mp 219-221 dec.°

Optical Rotation: [α]_D –60.3 (c, 0.3 in EtOH)

Other Data: Early isolates are often referred to as (–)-Catechin

Sigma: E3768

>>Derivative: Hexa-Ac

Physical Description: Cryst. (MeOH)

Melting Point: Mp 195-200° (191-193°)

Optical Rotation: [α]_D²⁰ –14.2 (Me₂CO)

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

Synonym(s): 3-*O*-(4-Hydroxybenzoyl)epigallocatechin

Molecular Formula: C₂₂H₁₈O₉

Molecular Weight: 426.379

Accurate Mass: 426.095085

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

Biological Source: Constit. of *Cistus salvifolius*

Optical Rotation: [α]_D²⁰ –60.1 (c, 0.06 in Me₂CO) (as per-Ac)