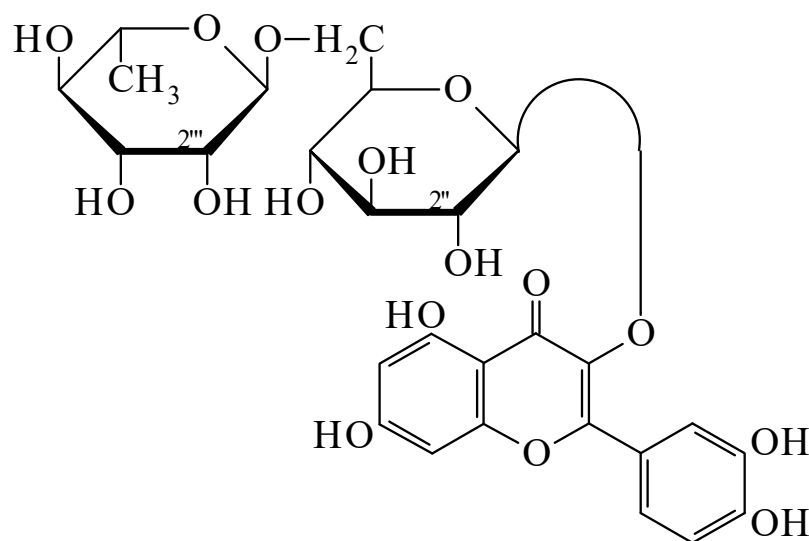




>>Entry Name: **Rutin**, JAN

Synonym(s): Quercetin 3-β-D-rutinoside. **Rutoside**, BAN, INN. Rutinic acid. **Sophorin**‡. Melin. Osyritin. Violaquercitrin. Myrticolorin. Globulariacitrin. Eldrin. Paliuroside. Rutinion. **Vitamin P**‡



CAS Registry Number: 153-18-4

Related CAS Registry Numbers(s): 22519-99-9

Molecular Formula: C₂₇H₃₀O₁₆

Molecular Weight: 610.524

Accurate Mass: 610.15339

Percentage Composition: C 53.12%; H 4.95%; O 41.93%

component

Biological Source: Constit. of many plants. Presence in over 30 families, mostly dicotyledons, demonstrated by 1955. First isol. from *Ruta graveolens* (Weiss, 1842)

Use/Importance: Used as 1mM soln. in 50% MeOH for photometric detn. of Mo ($\lambda_{\max}$ 400 nm, ϵ 22100), W ($\lambda_{\max}$ 405 nm, ϵ 40300). Antioxidant

Biological Use/Importance: Antioedemic, antiinflammatory, antithrombotic agent. Possesses antihypotensive, spasmolytic props. Antihaemorrhagic agent; shows anti-HIV activity

Physical Description: Yellow cryst. + 3H₂O (H₂O)

Melting Point: Mp 214-215 dec.° (anhyd.)

Optical Rotation: $[\alpha]_D^{23} +13.82$ (EtOH)

Calculated Log P Data: Log P -3.97 (uncertain value) (calc)

Hazard & Toxicity: LD₅₀ (rat, ipr) 2000 mg/kg

Fluka: 84082

Sigma: R5143

>>Derivative: 7-O-β-D-Glucopyranoside

CAS Registry Number: 30311-61-6

Molecular Formula: C₃₃H₄₀O₂₁

Molecular Weight: 772.666

Accurate Mass: 772.206215

Percentage Composition: C 51.30%; H 5.22%; O 43.48%

Biological Source: Isol. from *Nicotiana tabacum*, *Leucophysalis* spp. and other plant spp.

>>Derivative: 4'-O-β-D-Glucopyranoside

CAS Registry Number: 89439-59-8

Molecular Formula: C₃₃H₄₀O₂₁

Molecular Weight: 772.666

Accurate Mass: 772.206215

Percentage Composition: C 51.30%; H 5.22%; O 43.48%

Biological Source: Isol. from *Erodium pulverulentum* and *Erodium malacoides*