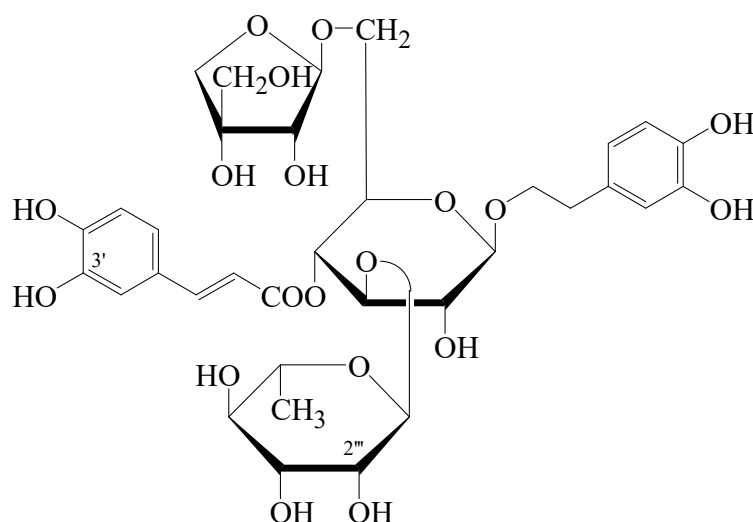




>>Entry Name: Forsythoside B



CAS Registry Number: 81525-13-5

**Molecular Formula:** C<sub>34</sub>H<sub>44</sub>O<sub>19</sub>

**Molecular Weight:** 756.71

**Accurate Mass:** 756.247685

**Percentage Composition:** C 53.97%; H 5.86%; O 40.17%

**Biological Source:** Isol. from the stems of *Phtheirospermum japonicum* and *Forsythia viridissima*

**Use/Importance:** Exhibits antibacterial activity against *Staphylococcus aureus*

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>26</sup> -67.2 (c, 1.37 in MeOH). [ $\alpha$ ]<sub>D</sub> -93 (MeOH)

**Solubility:** BERDY SOL: Poorly sol. hexane

**UV:** [neutral]  $\lambda_{\max}$  291 ( $\epsilon$  10680); 333 ( $\epsilon$  14400) (MeOH) (Berdy)

**Other Data:** Air-sensitive

>>Derivative: 3',3'',4',4''-Tetra-Me

**Molecular Formula:** C<sub>38</sub>H<sub>52</sub>O<sub>19</sub>

**Molecular Weight:** 812.817

**Percentage Composition:** C 56.15%; H 6.45%; O 37.40%

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> -91.2 (MeOH)

>>Derivative: 3'-Me ether

**Synonym(s):** Alyssonoside

CAS Registry Number: 142674-76-8

**Molecular Formula:** C<sub>35</sub>H<sub>46</sub>O<sub>19</sub>

**Molecular Weight:** 770.737

**Accurate Mass:** 770.263335

**Percentage Composition:** C 54.54%; H 6.02%; O 39.44%

**Biological Source:** Constit. of *Marrubium allysson*

**Physical Description:** Amorph. powder

>>Derivative: 2'''-O- $\alpha$ -L-Arabinopyranosyl

**Synonym(s):** Ballotetroside

CAS Registry Number: 188441-89-6

**Molecular Formula:** C<sub>39</sub>H<sub>52</sub>O<sub>23</sub>

**Molecular Weight:** 888.826

**Accurate Mass:** 888.289945

**Percentage Composition:** C 52.70%; H 5.90%; O 41.40%

**Biological Source:** Constit. of *Ballota nigra*

**Physical Description:** Amorph. powder

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub><sup>20</sup> -33 (c, 0.9 in MeOH)

**UV:** [neutral]  $\lambda_{\max}$  203 (); 222 (sh) (); 244 (sh) (); 291 (); 330 () (MeOH)

**References:**

Endo, K. *et al.*, *Heterocycles*, 1982, **19**, 261, (*isol*, *pmr*, *cmr*)

Takeda, Y., *J. Nat. Prod.*, 1988, **51**, 180

Calis, I. *et al.*, *Phytochemistry*, 1992, **31**, 3624, (*Alyssonoside*)

Seidel, V. *et al.*, *Phytochemistry*, 1997, **44**, 691, (*Ballotetroside*)