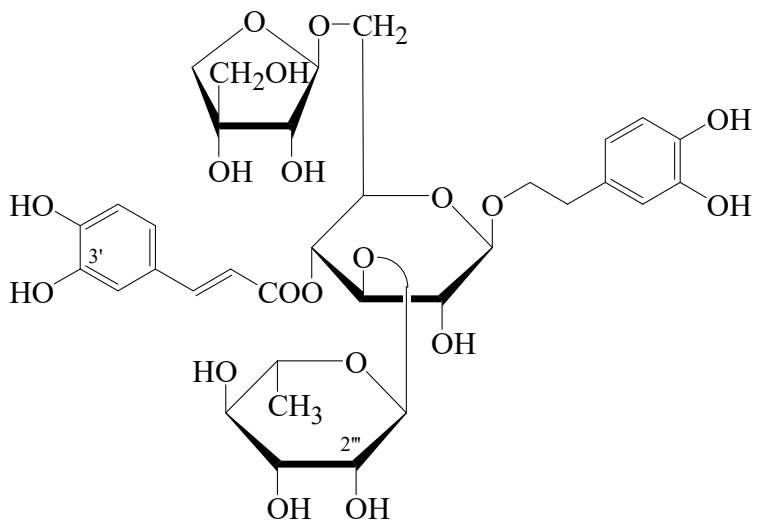
>>**Entry Name: Forsythoside B**



CAS Registry Number: 81525-13-5

Molecular Formula: $C_{34}H_{44}O_{19}$
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: $[\alpha]_D^{26}$ –67.2 (c, 1.37 in MeOH). $[\alpha]_D$ –93 (MeOH)
Solubility: BERDY SOL: Poorly sol. hexane
UV: [neutral] λ_{max} 291 (ε 10680); 333 (ε 14400) (MeOH) (Berdy)
Other Data: Air-sensitive

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

Molecular Formula: $C_{38}H_{52}O_{19}$
Molecular Weight: 812.817
Percentage Composition: C 56.15%; H 6.45%; O 37.40%
Optical Rotation: $[\alpha]_D$ –91.2 (MeOH)

>>**Derivative:** 3'-Me ether
Synonym(s): Alyssonoside

CAS Registry Number: 142674-76-8

Molecular Formula: $C_{35}H_{46}O_{19}$
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*-α-L-Arabinopyranosyl
Synonym(s): Ballotetroside

CAS Registry Number: 188441-89-6

Molecular Formula: $C_{39}H_{52}O_{23}$
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: $[\alpha]_D^{20}$ –33 (c, 0.9 in MeOH)
UV: [neutral] λ_{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)*