



>>>Derivative: 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranoside]

Synonym(s): Primulasaponin 1. Primulasaponin. Primulasaponin A

CAS Registry Number: 65312-86-9

Molecular Formula: C<sub>54</sub>H<sub>88</sub>O<sub>23</sub>

Molecular Weight: 1105.275

Accurate Mass: 1104.571645

Percentage Composition: C 58.68%; H 8.02%; O 33.29%

Biological Source: Constit. of *Primula* spp.

Physical Description: Cryst.

Melting Point: Mp 241-243°

Optical Rotation: [ $\alpha$ ]<sub>D</sub> +3 (c, 0.01 in MeOH). [ $\alpha$ ]<sub>D</sub><sup>26</sup> -29.9 (c, 1 in MeOH)

Other Data: Mp >140° dec.

>>>Derivative: 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 2)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 3)]- $\beta$ -D-glucuronopyranoside]

CAS Registry Number: 86667-22-3

Molecular Formula: C<sub>54</sub>H<sub>88</sub>O<sub>23</sub>

Molecular Weight: 1105.275

Accurate Mass: 1104.571645

Percentage Composition: C 58.68%; H 8.02%; O 33.29%

Biological Source: Constit. of roots of *Primula elatior*

Other Data: No phys. props reported

>>>Derivative: 3-O-[ $\beta$ -D-Glucopyranosyl-(1 $\rightarrow$ 3)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranoside]

CAS Registry Number: 137682-20-3

Molecular Formula: C<sub>54</sub>H<sub>88</sub>O<sub>23</sub>

Molecular Weight: 1105.275

Accurate Mass: 1104.571645

Percentage Composition: C 58.68%; H 8.02%; O 33.29%

Biological Source: Constit. of roots of Siberian ginseng (*Eleutherococcus (Acanthopanax) senticosus*)

Melting Point: Mp 255-258°

Optical Rotation: [ $\alpha$ ]<sub>D</sub><sup>22</sup> -45 (c, 0.4 in MeOH)

>>>Derivative: 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 4)-[ $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ ?)]- $\beta$ -D-glucuronopyranoside]

CAS Registry Number: 137682-21-4

Molecular Formula: C<sub>60</sub>H<sub>98</sub>O<sub>26</sub>

Molecular Weight: 1235.419

Accurate Mass: 1234.63464

Percentage Composition: C 58.33%; H 8.00%; O 33.67%

Biological Source: Constit. of roots of Siberian ginseng (*Eleutherococcus (Acanthopanax) senticosus*)

Melting Point: Mp 230° (dec.)

Optical Rotation: [ $\alpha$ ]<sub>D</sub><sup>22</sup> -15 (c, 0.5 in MeOH)

>>>Derivative: 3-O-[ $\alpha$ -L-Rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 3)-[ $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]- $\beta$ -D-glucuronopyranoside]

Synonym(s): Sakurasaponin

CAS Registry Number: 59527-84-3

Molecular Formula: C<sub>60</sub>H<sub>98</sub>O<sub>27</sub>

Molecular Weight: 1251.418

Accurate Mass: 1250.629555

Percentage Composition: C 57.59%; H 7.89%; O 34.52%

Biological Source: Constit. of roots of Japanese *Primula sieboldi* and roots of *Rapanea melanophloeos*

Biological Use/Importance: Shows antifungal activity

Physical Description: Cryst. (MeOH)

Melting Point: Mp 267-270° (266-268°)

Optical Rotation: [ $\alpha$ ]<sub>D</sub><sup>22</sup> -39 (c, 2 in MeOH)