



Molecular Formula: C₅₅H₈₆O₂₄

Molecular Weight: 1131.27

Accurate Mass: 1130.55091

Percentage Composition: C 58.39%; H 7.66%; O 33.94%

Biological Source: Constit. of *Aesculus hippocastanum*

Biological Use/Importance: Shows oedema-inhibitory props. Capillary protective. Pharmacological tool for the permeabilisation of cell membranes

Physical Description: Amorph. powder

Melting Point: Mp 224-225°

Optical Rotation: [α]_D²⁷ -23.7 (c, 5 in MeOH)

Hazard & Toxicity: LD₅₀ (rat, orl) 833 mg/kg. LD₅₀ (rat, ipr) 10.2 mg/kg. Exp. reprod. and teratogenic effects

Fluka: 2320

>> **Derivative:** 21-Tigloyl, 22-Ac, 3-*O*-[β -D-glucopyranosyl-(1→4)-[β -D-xylopyranosyl-(1→2)]- β -D-glucuronopyranoside]

Synonym(s): Escin IIa

CAS Registry Number: 158732-55-9

Molecular Formula: C₅₄H₈₄O₂₃

Molecular Weight: 1101.244

Accurate Mass: 1100.540345

Percentage Composition: C 58.90%; H 7.69%; O 33.42%

Biological Source: Constit. of *Aesculus hippocastanum*

Physical Description: Cryst.

Melting Point: Mp 206.5-208.5°

Optical Rotation: [α]_D -35.5 (MeOH)

>> **Derivative:** 21-Tigloyl, 22-Ac, 3-*O*-[β -D-glucopyranosyl-(1→4)-[β -D-glucopyranosyl-(1→2)]- β -D-glucuronopyranoside]

Synonym(s): Escin Ia

CAS Registry Number: 123748-68-5

Molecular Formula: C₅₅H₈₆O₂₄

Molecular Weight: 1131.27

Accurate Mass: 1130.55091

Percentage Composition: C 58.39%; H 7.66%; O 33.94%

Biological Source: Constit. of *Aesculus hippocastanum*

Physical Description: Cryst.

Melting Point: Mp 224.9-226.7°

Optical Rotation: [α]_D -22 (MeOH)

>> **Derivative:** 21-Tigloyl, 28-Ac, 3-*O*-[β -D-xylopyranosyl-(1→2)-[β -D-glucopyranosyl-(1→4)]- β -D-glucuronopyranoside]

Synonym(s): Isoescin IIa

CAS Registry Number: 259099-82-6

Molecular Formula: C₅₄H₈₄O₂₃

Molecular Weight: 1101.244

Accurate Mass: 1100.540345

Percentage Composition: C 58.90%; H 7.69%; O 33.42%

Biological Source: Constit. of *Aesculus chinensis*

Physical Description: Amorph. powder

>> **Derivative:** 21-Tigloyl, 28-Ac, 3-*O*-[β -D-glucopyranosyl-(1→2)-[β -D-glucopyranosyl-(1→4)]- β -D-glucuronopyranoside]

Synonym(s): Escin IVa. Isoescin Ia

CAS Registry Number: 219944-39-5

Molecular Formula: C₅₅H₈₆O₂₄

Molecular Weight: 1131.27

Accurate Mass: 1130.55091

Percentage Composition: C 58.39%; H 7.66%; O 33.94%

Biological Source: Constit. of *Aesculus hippocastanum* and *Aesculus chinensis*

Physical Description: Cryst. (CHCl₃/MeOH)

Melting Point: Mp 193.6-195.5°

Optical Rotation: [α]_D²⁵ -4 (c, 0.1 in MeOH)