



Formula: C₂₃H₃₂O₆

MW: 404.5

CAS: 66-28-4

TNP NUMBER: TNP00448

MDL NUMBER: MFCD02063856

IUPAC: (1S,2S,5S,7S,11S,10R,14R,15R)-5,7,11-trihydroxy-15-methyl-14-(5-oxo(3-2-hydrofuryl))tetracyclo[8.7.0.0.0]heptadecane-2-carbaldehyde

Smiles:

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C1([C@@H]2[C]3([C]([C@H]4([C@@H]([C]5(CC[C@@H](C[C]5(CC4)O)O)C=O)(CC3)))(CC2)O)C)=CC(=O)OC1
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By acid or enzymic hydrolysis of glycosides present in several species of *Strophanthus*, Apocynaceae

ACCEPTORS: 6

DONORS: 3

ROTATION BONDS: 0

N+O: 6

Chiral Centers: 8

LogP: 3.48

LogS: -4.71

LIPINSKI: 4

Monograph Number: 0008933

Title: Strophanthidin

CAS Registry Number: 66-28-4

CAS Name: (3b,5b)-3,5,14-Trihydroxy-19-oxocard-20(22)-enolide

Additional Names: apocynamarin; convallatoxigenin; corchorin; cymarigenin; cynotoxin; corchorgenin; corchsularin

Molecular Formula: C₂₃H₃₂O₆

Molecular Weight: 404.50.

Percent Composition: C 68.29%, H 7.97%, O 23.73%

Literature References: By acid or enzymic hydrolysis of glycosides present in several species of *Strophanthus*, Apocynaceae. Isoln: Jacobs, Heidelberg, J. Biol. Chem. 54, 253 (1922). Structure: Kon, Chem. Ind. (London) 53, 593, 956 (1934); Jacobs, Elderfield, Science 80, 533 (1934). Identity with corchorin, corchorgenin and corchsularin: Sen et al., Helv. Chim. Acta 40, 588 (1957). Synthesis from pregnenolone acetate, q.v.: E. Yoshii et al., J. Org. Chem. 43, 3946 (1978). Toxicity study: Graebner, Geisel, Arzneim.-Forsch. 22, 1854 (1972). Reviews: Elderfield, Chem. Rev. 17, 187 (1935); Tschesche, Ergeb. Physiol. 38, 31 (1936); Stoll, The Cardiac Glycosides (Pharmaceutical Press, London, 1937); Strain in Organic Chemistry vol. II, Gilman, Ed. (New York, 2nd ed., 1943); Fieser, Fieser, Steroids (Reinhold, New York, 1959) pp 729-730, 736-750.

Properties: Orthorhombic tablets from 5 parts methanol and 10 parts water. Very poisonous!
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