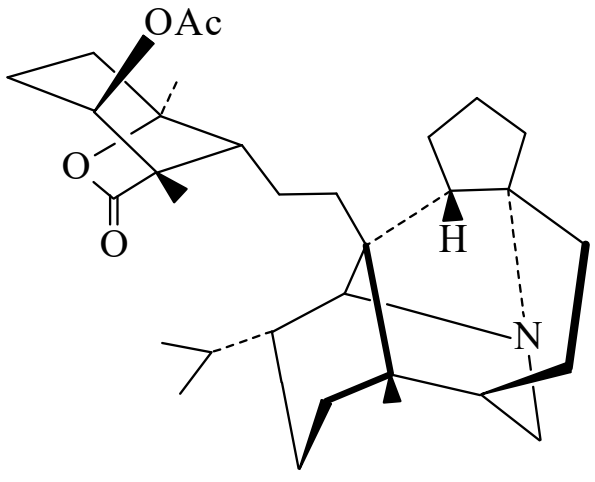
>>**Entry Name: Daphmacrine**
Synonym(s): 2-(Acetyloxy)-1,5-dimethyl-8-(23-nordaphnan-22-yl)-6-oxabicyclo[3.2.1]octan-7-one, 9CI



Absolute conf gur ation

CAS Registry Number: 19775-48-5

Molecular Formula: $C_{32}H_{49}NO_4$
Molecular Weight: 511.743
Accurate Mass: 511.366159
Percentage Composition: C 75.11%; H 9.65%; N 2.74%; O 12.51%
Biological Source: Alkaloid from *Daphniphyllum macropodum* (Daphniphyllaceae)
Physical Description: Noncryst.

>>**Derivative:** Hydrobromide

Physical Description: Cryst. ($CHCl_3/Me_2CO$)
Melting Point: Mp 300°
Optical Rotation: $[\alpha]_D$ +30.1 (c, 1.79 in MeOH)

>>**Derivative:** Methiodide

Physical Description: Plates + $1Me_2CO$ (Me_2CO/Et_2O)
Melting Point: Mp 274-275°

>>**Derivative:** Lactol
Synonym(s): Daphmacropodine. 1,5-Dimethyl-8-(2,3-nordaphnan-22-yl)-6-oxabicyclo[3.2.1]octane-2,7-diol 2-acetate, 9CI

CAS Registry Number: 39729-21-0

Molecular Formula: $C_{32}H_{51}NO_4$
Molecular Weight: 513.759
Accurate Mass: 513.381809
Percentage Composition: C 74.81%; H 10.01%; N 2.73%; O 12.46%
Biological Source: Alkaloid from *Daphniphyllum macropodum* (Daphniphyllaceae)
Melting Point: Mp 214-215°
Optical Rotation: $[\alpha]_D$ +4.9 (c, 1.11 in $CHCl_3$)
Other Data: The lactone carbonyl of Daphmacrine is reduced to OH (stereochem. undetermined)

>>**Derivative:** Lactol; hydrobromide

Physical Description: Cryst. (Me_2CO)
Melting Point: Mp 215-218°

References:

Nakano, T. *et al.*, *Chem. Comm.*, 1968, 600, *(isol, ir, pmr, ms, cryst struct)*
Gibbons, C.S. *et al.*, *J.C.S.(B)*, 1969, 840, *(cryst struct)*