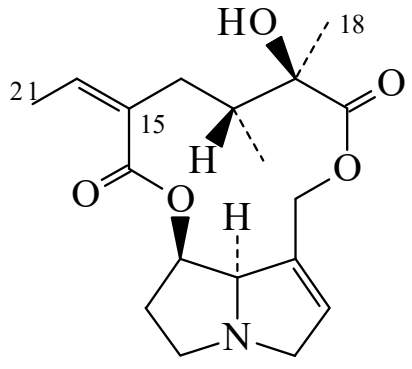
>>**Entry Name: Senecionine**
Synonym(s): 12-Hydroxysenecionan-11,16-dione, 9CI. **Aureine**‡



Absolute
con*f* guration

CAS Registry Number: 130-01-8

Molecular Formula: $C_{18}H_{25}NO_5$
Molecular Weight: 335.399
Accurate Mass: 335.173274
Percentage Composition: C 64.46%; H 7.51%; N 4.18%; O 23.85%

E
Biological Source: Alkaloid from many *Senecio* spp., also *Brachyglottis repanda, Emilia sonchifolia, Erechtites hieracifolia, Petasites hybridus* and other Compositae. Large amts. obtainable from *Senecio triangularis*; also obt. from *Castilleja rhexifolia* (Scrophulariaceae)
Use/Importance: Shows antineoplastic activity *vs.* Walker 256 carcinosarcoma
Melting Point: Mp 232-233°
Optical Rotation: $[\alpha]_D$ –56 ($CHCl_3$)
Calculated Log P Data: Log P –0.04 (uncertain value) (calc)
Other Data: Hieracifoline and Pterophine were mixts. of Senecionine and Seneciphylline CHG27-H
Hazard & Toxicity: LD_{50} (rat, ivn) 41 mg/kg. Exp. reprod. and teratogenic effects. Hepatotoxic, also causes lung lesions ; BERDY HAZD : LD_{50} (mus, ivn) 64 mg/kg

>>**Derivative:** *N*-Oxide
Synonym(s): Senecionine *N*-oxide

CAS Registry Number: 13268-67-2

Molecular Formula: $C_{18}H_{25}NO_6$
Molecular Weight: 351.399
Accurate Mass: 351.168189
Percentage Composition: C 61.53%; H 7.17%; N 3.99%; O 27.32%

Use/Importance: Antineoplastic agent
Physical Description: Hygroscopic solid
Melting Point: Mp 140-141 dec.° (synthetic)
Calculated Log P Data: Log P –2.01 (uncertain value) (calc)
Hazard & Toxicity: LD_{50} (mus, ipr) 75 mg/kg

>>**Derivative:** 15*E*-Isomer
Synonym(s): Integerrimine. Squalidine. Alkaloid SD

CAS Registry Number: 480-79-5

Molecular Formula: $C_{18}H_{25}NO_5$
Molecular Weight: 335.399
Accurate Mass: 335.173274
Percentage Composition: C 64.46%; H 7.51%; N 4.18%; O 23.85%
Biological Source: Alkaloid from *Senecio* spp., *Crotalaria incana* and other *Crotalaria* spp., *Cacalia hastata* and others (Leguminosae, Compositae)
Melting Point: Mp 172°
Optical Rotation: $[\alpha]_D$ –29 (–18.3) ($CHCl_3$). $[\alpha]_D$ +4 (MeOH)
UV: [neutral] λ_{max} 210 (ε 10620) (MeOH) (Berdy)