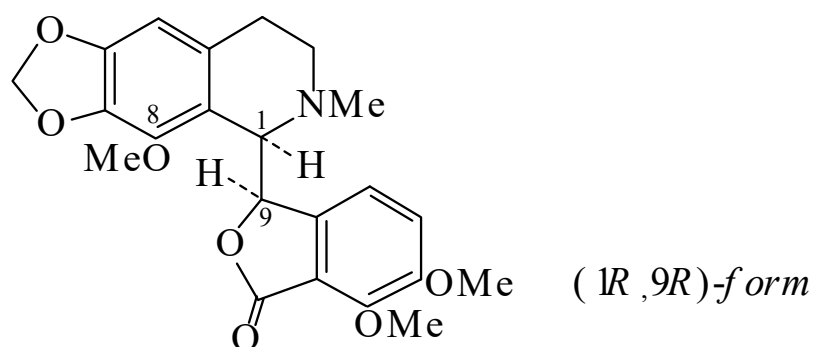




>>Entry Name: Narcotine

Synonym(s): 6,7-Dimethoxy-3-(5,6,7,8-tetrahydro-4-methoxy-6-methyl-1,3-dioxolo[4,5-g]isoquinolin-5-yl)-1(3*H*)-isobenzofuranone, 9Cl. **Noscapine**, BAN, INN. Gnoscopine. Opiantine. Anarkotin. Tusscapine. NSC 5366. Many other names



Molecular Formula: C₂₂H₂₃NO₇

Molecular Weight: 413.426

Accurate Mass: 413.147454

Percentage Composition: C 63.92%; H 5.61%; N 3.39%; O 27.09%

pKa Value: p*K*_a 5.86 (24°)

>>Variant: (1*R*,9*R*)-form

Synonym(s): (–)-β-Narcotine

CAS Registry Number: 3860-46-6

Molecular Formula: C₂₂H₂₃NO₇

Molecular Weight: 413.426

Accurate Mass: 413.147454

Percentage Composition: C 63.92%; H 5.61%; N 3.39%; O 27.09%

Source/Synthesis: Synthetic

Melting Point: Mp 181-182° (176°)

Optical Rotation: [α]_D²² –100 (c, 1 in dioxan). [α]_D²⁰ –87.5 (c, 1 in CHCl₃)

Hazard & Toxicity: LD₅₀ (mus, orl) 840 mg/kg

Rare Chemicals Library: S44781-1

>>Variant: (1*R*,9*S*)-form

Synonym(s): (–)-α-Narcotine. Longatin

CAS Registry Number: 128-62-1

Molecular Formula: C₂₂H₂₃NO₇

Molecular Weight: 413.426

Accurate Mass: 413.147454

Percentage Composition: C 63.92%; H 5.61%; N 3.39%; O 27.09%

Biological Source: Alkaloid from *Corydalis cava* (*Corydalis tuberosa*), *Papaver fugax*, *Papaver paeoniflorum*, *Papaver persicum* and *Papaver somniferum*. Byprod. in extraction of morphine from opium. One of the first alkaloids to be isol. (Fumariaceae, Papaveraceae)

Use/Importance: Antitussive agent, of similar potency to and poss. with some advantages over codeine. Mod. effective smooth muscle relaxant. Reference material used in elemental microanalysis

Physical Description: Stout needles (EtOH)

Melting Point: Mp 176°

Optical Rotation: [α]_D –200 (CHCl₃)

Calculated Log P Data: Log P 2.74 (uncertain value) (calc)

UV: [neutral] λ_{max} 209 (ε 72500); 291 (ε 4000); 309 (ε 4900) (EtOH) (Berdy)

Other Data: Polymorphic. This is prob. the only nat. occurring stereoisomer but it readily epimerises to (–) β-Narcotine which may be isol. as an artifact. Opt. rotn. highly solv. and concn. dependent

Hazard & Toxicity: LD₅₀ (rat, orl) 1520 mg/kg. Mutagenic props. ; BERDY HAZD : LD₅₀ (mus, ivn) 83 mg/kg

Aldrich: 36396-0

>>Derivative: Hydrochloride

CAS Registry Number: 912-60-7

Hazard & Toxicity: LD₅₀ (mus, orl) 853 mg/kg. Mutagenic props.

Aldrich: 36397-9

Fluka: 74672

Sigma: N9007