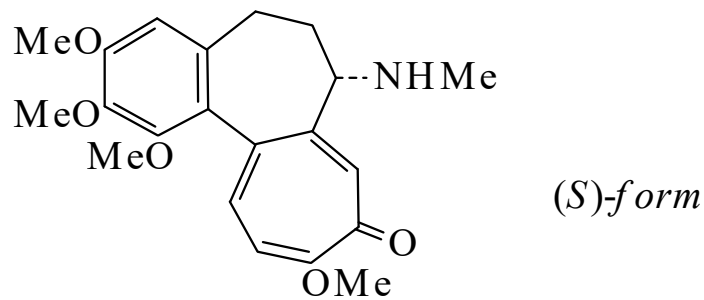




>>Entry Name: Demecolcine, BAN, INN

Synonym(s): *N*-Methyldeacetylcolchicine. Alkaloid F. Colchamine. Colcemid. Kolkamin. Omain. Santavy's Substance F. Ciba 12669A. NSC 3096



Molecular Formula: C₂₁H₂₅NO₅

Molecular Weight: 371.432

Accurate Mass: 371.173274

Percentage Composition: C 67.91%; H 6.78%; N 3.77%; O 21.54%

>>Variant: (*S*)-form

CAS Registry Number: 477-30-5

Molecular Formula: C₂₁H₂₅NO₅

Molecular Weight: 371.432

Accurate Mass: 371.173274

Percentage Composition: C 67.91%; H 6.78%; N 3.77%; O 21.54%

Biological Source: Alkaloid from *Colchicum speciosum*, several other *Colchicum* spp., *Merendera jolantae* (Liliaceae), *Merendera persica* and *Androcymbium melanthioides*

Use/Importance: Antineoplastic and antimitotic agent. Antitubulin agent which induces apoptosis

Melting Point: Mp 186°

Optical Rotation: $[\alpha]_D^{23}$ -129 (c, 1.02 in CHCl₃)

Calculated Log P Data: Log P 0.6 (calc)

UV: [neutral] $\lambda_{\max}$ 245 (ϵ 35500); 355 (ϵ 17400) (MeOH) (Berdy) [neutral] $\lambda_{\max}$ 234 (); 350 () (EtOH) (Berdy)

Hazard & Toxicity: LD₅₀ (mus, orl) 25.5 mg/kg. LD₅₀ (mus, ipr) 35 mg/kg. Exp. reprod. and teratogenic effects. Mutagenic props.

Aldrich: 36040-6

Fluka: 27645

Sigma: D1925

>>Derivative: *N*-Formyl

Synonym(s): *N*-Formyldemecolcine. Alkaloid CC-19

CAS Registry Number: 14686-61-4

Molecular Formula: C₂₂H₂₅NO₆

Molecular Weight: 399.443

Accurate Mass: 399.168189

Percentage Composition: C 66.15%; H 6.31%; N 3.51%; O 24.03%

Biological Source: Alkaloid from the seeds of *Colchicum cornigerum* (Liliaceae)

Physical Description: Pale-yellow prisms (MeOH/Et₂O)

Optical Rotation: $[\alpha]_D^{22}$ -189 (c, 1.0192 in CHCl₃). $[\alpha]_D^{22}$ -202 (c, 0.79 in EtOH)

>>Derivative: *N*-Ac

Synonym(s): *N*-Methylcolchicine

Melting Point: Mp 199-200°. Mp 233-235° (double Mp)

>>Derivative: *N*-Me

Synonym(s): *N*-Methyldemecolcine. Alkaloid CC-5

CAS Registry Number: 7336-44-9

Molecular Formula: C₂₂H₂₇NO₅

Molecular Weight: 385.459

Accurate Mass: 385.188924

Percentage Composition: C 68.55%; H 7.06%; N 3.63%; O 20.75%

Biological Source: Alkaloid from seeds, leaves, stems and flowers of *Colchicum cornigerum* (Liliaceae) and *Kreysigia multiflora*

Physical Description: Pale-yellow prisms (EtOAc/Et₂O)

Melting Point: Mp 208-210° (205-208°)