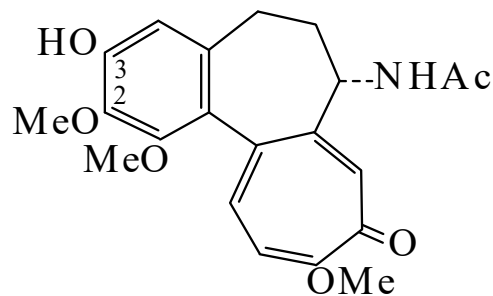




>>Entry Name: 3-Demethylcolchicine

Synonym(s): Substance C



CAS Registry Number: 7336-33-6

Molecular Formula: $C_{21}H_{23}NO_6$

Molecular Weight: 385.416

Accurate Mass: 385.152539

Percentage Composition: C 65.44%; H 6.01%; N 3.63%; O 24.91%

Biological Source: Alkaloid from *Androcymbium gramineum*, *Androcymbium melanthioides*, *Colchicum autumnale* and several other *Colchicum* spp., *Bulbocodium vernum*, *Gloriosa superba* and some other *Gloriosa* spp., *Merendera caucasica* and other *Merendera* spp., *Littonia modesta*, *Ornithoglossum glaucum* var. *grandiflorum*, *Ornithoglossum viride* and *Sandersonia aurantiaca* (Liliaceae)

Use/Importance: Antineoplastic agent

Physical Description: Prisms ($CHCl_3$)

Melting Point: Mp 176-182° (180-190 and 275-280°, double Mp)

Optical Rotation: $[\alpha]_D^{22} -130.7$ (c, 2.0118 in $CHCl_3$)

Calculated Log P Data: Log P -0.45 (uncertain value) (calc)

UV: [neutral] λ_{max} 234 (); 350 () (EtOH) (Berdy)

Other Data: Does not occur in fresh plant extracts. Present only in dried material, attached in an unknown manner to cell constituents, and liberated enzymatically

>>Derivative: Ac

Physical Description: Fine needles (EtOAc/Et₂O)

Melting Point: Mp 227-228°

Optical Rotation: $[\alpha]_D^{20} -93$ (c, 0.822 in $CHCl_3$)

>>Derivative: De-Ac

Synonym(s): 3-Demethyl-N-deacetylcolchicine. Substance U

Molecular Formula: $C_{19}H_{21}NO_5$

Molecular Weight: 343.379

Accurate Mass: 343.141974

Percentage Composition: C 66.46%; H 6.16%; N 4.08%; O 23.30%

Biological Source: Alkaloid from the corms, seeds and flowers of *Colchicum autumnale* (Liliaceae)

Other Data: The phys. props. of the free base have not been reported

>>Derivative: O-β-D-Glucopyranoside

Synonym(s): Colchicoside

CAS Registry Number: 477-29-2

Molecular Formula: $C_{27}H_{33}NO_{11}$

Molecular Weight: 547.558

Accurate Mass: 547.205364

Percentage Composition: C 59.23%; H 6.07%; N 2.56%; O 32.14%

Biological Source: Alkaloid from seeds of *Colchicum autumnale* and *Gloriosa superba* (Liliaceae)

Use/Importance: Antiinflammatory agent

Physical Description: Cryst. (EtOH)

Melting Point: Mp 192-195°. Mp 216-218° (block)

Calculated Log P Data: Log P -3.61 (uncertain value) (calc)

>>Derivative: O-β-D-Glucopyranoside, tetra-O-Ac

Melting Point: Mp 175-177°

Optical Rotation: $[\alpha]_D -57$ (c, 1 in $CHCl_3$)

References: