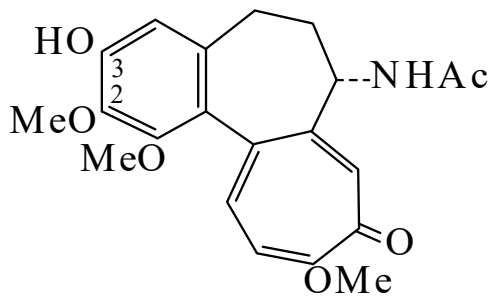
>>**Entry Name: 3-Demethylcolchicine**
Synonym(s): Substance C



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 constits., and liberated enzymatically

>>**Derivative:** Ac

Physical Description: Fine needles ($EtOAc/Et_2O$)
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: