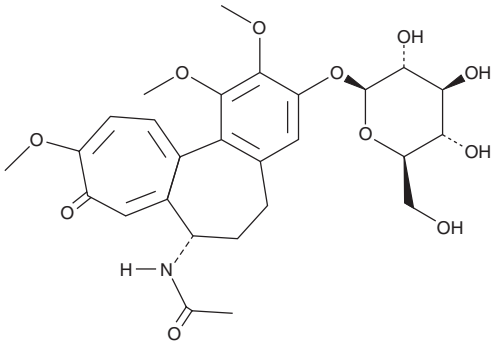
PRODUCT INFORMATION

Colchicoside

Item No. 11831

CAS Registry No.:	477-29-2
Formal Name:	N-[(7S)-3-(β-D-glucopyranosyloxy)-5,6,7,9-tetrahydro-1,2,10-trimethoxy-9-oxobenzo[a]heptalen-7-yl]-acetamide
Synonym:	3-Demethylcolchicine glucoside
MF:	$C_{27}H_{33}NO_{11}$
FW:	547.6
Purity:	≥98%
UV/Vis.:	λ_{max}: 244, 247 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Natural/Source unknown



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Colchicoside is supplied as a crystalline solid. A stock solution may be made by dissolving the colchicoside in the solvent of choice, which should be purged with an inert gas. Colchicoside is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of colchicoside in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of colchicoside can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of colchicoside in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Colchicoside is a glycoside form of 3-demethylcolchicine that has been found in *G. superba*.[1] Unlike cholchicine and 3-demethylcolchicine, colchicoside does not displace [^{3}H]-colchicine from rat brain tubulin *in vitro* when used at a concentration of 25 µM.[2] Colchicoside (1 and 10 µM) increases levels of the cytochrome P450 (CYP) isoforms CYP2C9 and CYP2E1 in primary human hepatocytes.[3]

References

1. Capistrano, I.R., Vangestel, C., Vanpachtenbeke, H., *et al.* Coadministration of a *Gloriosa superba* extract improves the *in vivo* antitumoural activity of gemcitabine in a murine pancreatic tumour mode. *Phytomedicine* **23(12)**, 1434-1440 (2016).
2. Sugio, K., Maruyama, M., Tsurufuji, S., *et al.* Separation of tubulin-binding and anti-inflammatory activity in colchicine analogs and congeners. *Life Sci.* **40(1)**, 35-39 (1987).
3. Dvorák, Z., Ulrichová, J., Modrianský, M., *et al.* Effect of colchicine and its derivatives on the expression of selected isoforms of cytochrome P450 in primary cultures of human hepatocytes. *Acta Univ. Palacki. Olomuc. Fac. Med.* **143**, 47-50 (2000).

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