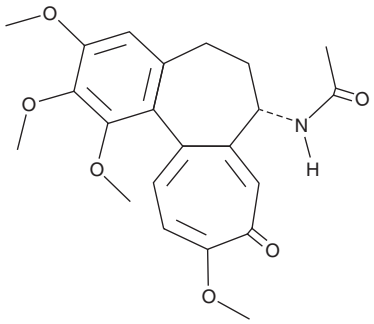
PRODUCT INFORMATION

Colchicine

Item No. 9000760

CAS Registry No.:	64-86-8
Formal Name:	N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]-acetamide
MF:	$C_{22}H_{25}NO_6$
FW:	399.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 202, 243, 352 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Colchicine is supplied as a crystalline solid. A stock solution may be made by dissolving the colchicine in the solvent of choice, which should be purged with an inert gas. Colchicine is soluble in organic solvents such as ethanol and DMSO. The solubility of colchicine in these solvents is approximately 25 mg/ml.

Description

Colchicine is an inhibitor of microtubule polymerization (IC_{50} = 3.2 µM) that binds to tubulin, which disrupts spindle formation during mitosis.[1] It inhibits growth of MCF-7 human breast carcinoma cells with an IC_{50} value of 13 nM.[1] Colchicine has anti-inflammatory activity, inhibiting neutrophil motility and activity when used at a dose of 5 µmol/kg in a mouse model of gout and preventing the deposition of uric acid.[2,3]

References

1. Martino, G.D., Regina, G.L., Coluccia, A., *et al.* Arylthioindoles, potent inhibitors of tubulin polymerization. *J. Med. Chem.* **47(25)**, 6120-6123 (2004).
2. McCarty, D.J. Urate crystals, inflammation, and colchicine. *Arthritis Rheum.* **58(2)**, S20-S24 (2008).
3. Chia, E.W., Grainger, R., and Harper, J.L. Colchicine suppresses neutrophil superoxide production in a murine model of gouty arthritis: A rationale for use of low-dose colchicine. *Br. J. Pharmacol.* **153(6)**, 1288-95 (2008).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM