

Product Name:	Colchicine
Product Number:	C093
CAS Number:	64-86-8
Molecular Formula:	C ₂₂ H ₂₅ NO ₆
Molecular Weight:	399.44
Form:	Powder
Appearance:	Light Yellow Powder
Water Content (Karl Fischer):	≤5.0%
Storage Conditions:	2-8 °C
Description:	<p>Colchicine is a mitotic poison which has been used in research as a chemotherapeutic agent for cancer.</p> <p>This product is considered a dangerous good. Quantities above 1 g may be subject to additional shipping fees. Please contact us for specific questions.</p>
Mechanism of Action:	<p>Since one of the defining characteristics of cancer cells is a significantly increased rate of mitosis, cancer cells are significantly more vulnerable to colchicine poisoning than are normal cells. However, the therapeutic value of colchicine against cancer is (as is typical with chemotherapy agents) limited by its toxicity against normal cells.</p>
Cancer Applications	<p>Colchicine can be used to study the effects of mitosis in cancer cells.</p>
References:	<p>Fakih, M., Replogle, T., Lehr, J. E., Pienta, K. J. and Yagoda, A. (1995), Inhibition of prostate cancer growth by estramustine and colchicine. <i>Prostate</i>, 26: 310–315. doi: 10.1002/pros.2990260606</p> <p>Jordan, A., et al., Tubulin as a target for anticancer drugs: agents which interact with the mitotic spindle. <i>Med. Res. Rev.</i> 18, 259-296, (1998)</p> <p>DeVincenzo, R., et al., Antiproliferative activity of colchicine analogues on MDR-positive and MDR-negative human cancer cell lines. <i>Anticancer Drug Des.</i> 13, 19-33, (1998)</p> <p>Karapidaki, I., et al., Genotoxic, Cytostatic, Antineoplastic And Apoptotic Effects Of Newly Synthesized Antitumour Steroidal Esters. <i>Mol. Cell.</i> 675, 51-9, (2009)</p>