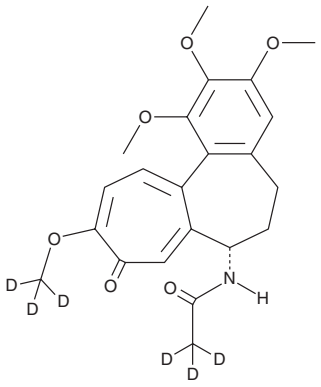
PRODUCT INFORMATION

Colchicine-d_6

Item No. 25280



CAS Registry No.:	1217651-73-4
Formal Name:	(S)-N-(1,2,3-trimethoxy-10-(methoxy-d_3)-9-oxo-5,6,7,9-tetrahydrobenzo[a]heptalen-7-yl)acetamide-2,2,2-d_3
MF:	$C_{22}H_{19}D_6NO_6$
FW:	405.5
Chemical Purity:	≥98% (Colchicine)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_6); ≤1% d_0
Supplied as:	A 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-d_6 is intended for use as an internal standard for the quantification of colchicine (Item No. 9000760) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Colchicine-d_6 is supplied as a solid. A stock solution may be made by dissolving the colchicine-d_6 in the solvent of choice, which should be purged with an inert gas. Colchicine-d_6 is slightly soluble in chloroform and methanol.

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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

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