

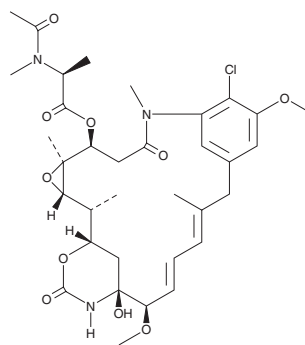
PRODUCT INFORMATION



Maytansine

Item No. 36062

CAS Registry No.: 35846-53-8
Synonyms: Maitansine, NSC 153858
MF: C₃₄H₄₆ClN₃O₁₀
FW: 692.2
Purity: ≥98%
UV/Vis.: λ_{max}: 232, 253 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Synthetic



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

Laboratory Procedures

Maytansine is supplied as a solid. A stock solution may be made by dissolving the maytansine in the solvent of choice, which should be purged with an inert gas. Maytansine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of maytansine in these solvents is approximately 2, 10, and 1 mg/ml, respectively.

Description

Maytansine is an ansa macrolide originally isolated from *M. serrata* that has anticancer activity.¹ It inhibits the growth of L1210, L-5178-Y, and P388 murine leukemia cells (EC₅₀s = 0.6, 12, and 1.5 nM, respectively). Maytansine (20 μM) inhibits erythrocyte and brain tubulin polymerization.² *In vivo*, maytansine (0.025-0.1 mg/kg) increases survival in a P388 murine leukemia model.¹ It has also been used in the synthesis of cytotoxic payload moieties of antibody-drug conjugates (ADCs).³

References

1. Wolpert-Defilippes, M.K., Adamson, R.H., Cysyk, R.L., *et al.* Initial studies on the cytotoxic action of maytansine, a novel ansa macrolide. *Biochem. Pharmacol.* **24(6)**, 751-754 (1975).
2. Luduena, R.F., Anderson, W.H., Prasad, V., *et al.* Interactions of vinblastine and maytansine with tubulin. *Ann. N. Y. Acad. Sci.* **466**, 718-732 (1986).
3. Yaghoubi, S., Karimi, M.H., Lotfinia, M., *et al.* Potential drugs used in the antibody-drug conjugate (ADC) architecture for cancer therapy. *J. Cell Physiol.* **235(1)**, 31-64 (2020).

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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