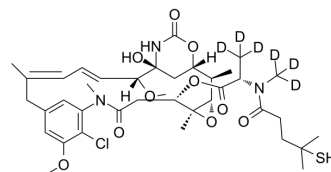


DM4-d6

| | |
|---------------------------|---|
| Cat. No.: | HY-12454S |
| Molecular Formula: | C ₃₈ H ₄₈ D ₆ ClN ₃ O ₁₀ S |
| Molecular Weight: | 786.4 |
| Target: | Microtubule/Tubulin; ADC Cytotoxin |
| Pathway: | Cell Cycle/DNA Damage; Cytoskeleton; Antibody-drug Conjugate/ADC Related |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | |
|--------------------|--|
| Description | DM4-d6 is deuterium labeled DM4. DM4 is an antitubulin agent that inhibit cell division. DM4 can be used in the preparation of antibody drug conjugate. |
| In Vitro | Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

REFERENCES

[1]. Tang R, et al. P-gp activity is a critical resistance factor against AVE9633 and DM4 cytotoxicity in leukaemia cell lines, but not a major mechanism of chemoresistance in cells from acute myeloid leukaemia patients. *BMC Cancer*. 2009 Jun 23;9:199.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.

Caution: Product has not been fully validated for medical applications. For research use only.

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