Tubulin polymerization-IN-37

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| Cat. No.:HY-151398CAS No.:2011784-92-0Molecular Formula:C1,9H20N2O4Molecular Weight:340.37Target:Microtubule/TubulinPathway:Cell Cycle/DNA Damage; CytoskeletonStorage:Please store the product under the recommended conditions in the Certificate of Analysis. | |
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Product Data Sheet

| BIOLOGICAL ACTIV | | | | |
|---------------------------|---|--|--|--|
| Description | Tubulin polymerization-IN-37 is a tubulin polymerization inhibitor (IC ₅₀ : 2.3 μM). Tubulin polymerization-IN-37 binds to the colchicine site of tubulin and inhibits colchicine binding. Tubulin polymerization-IN-37 can be used in the research of cancers, such as lymphomas ^[1] . | | | |
| IC ₅₀ & Target | Tubulin polymerization ^[1] | | | |
| In Vitro | Tubulin polymerization-II MINO cells ^[1] . Tubulin polymerization-II Tubulin polymerization-II | Tubulin polymerization-IN-37 (5 μM) inhibits colchicine binding to tubulin by 80% ^[1] . Tubulin polymerization-IN-37 shows cytotoxicity against MCF-7 cells (IC ₅₀ : 0.21 μM) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. | | |
| | Cell Line: | VL51, MINO, HBL1, SU-DHL-10 cells. | | |
| | Concentration: | 0-10 μΜ | | |
| | Incubation Time: | 72 h | | |
| | Result: | Inhibited cell proliferation to 28.1%, 8.6%, 7.3%, 13.8% at 1 μ M, respectively.IC_{50}s: 0.12, 0.07, 0.08, 0.07 μ M, respectively. | | |
| | Cell Cycle Analysis ^[1] | Cell Cycle Analysis ^[1] | | |
| | Cell Line: | VL51 and MINO cells | | |
| | Concentration: | 50 and 500 nM | | |
| | Incubation Time: | 24, 48 and 72 h | | |
| | Result: | Arrested cell in G2/M phase. | | |

REFERENCES

[1]. Michael D Wendt, et al. Development of [1,2]oxazoloisoindoles tubulin polymerization inhibitors: Further chemical modifications and potential therapeutic effects against lymphomas. J Med Chem. 2006 Feb; 49(3): 1165-81.

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

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