Tubulin polymerization-IN-35

Cat. No.: HY-151396

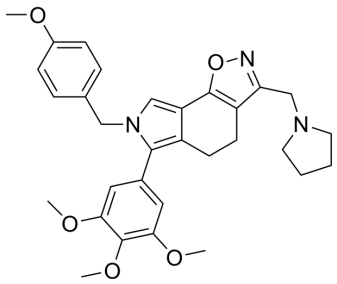
Molecular Formula: $C_{31}H_{35}N_3O_5$

Molecular Weight: 529.63

Target: Microtubule/Tubulin

Pathway: Cell Cycle/DNA Damage; Cytoskeleton

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Tubulin polymerization-IN-35 is an inhibitor of [1,2]oxazoloisoindoles tubulin polymerization, demonstrates high selectivity against marginal zone lymphoma VL51 cell line[1].

IC_{50} & Target

[1,2]oxazoloisoindoles tubulin polymerization[1]

In Vitro

Tubulin polymerization-IN-35 (compound 17j) (10 nM-100 μM; 72 h) has antiproliferative activity against 9 NCI subpanels (leukemia, non-small-cell lung, colon, central nervous system, melanoma, ovarian, renal, prostate, breast) with GI_{50}s ranging from 0.24 μM to 23.4 μM, and a mean graph_mid point (MG_MID) values of 1.32 μM[1].

Tubulin polymerization-IN-35 (0.15-10 μM; 72 h) shows potent growth inhibitory effects on different lymphoma lines, and demonstrates high selectivity against the VL51 cell line (Marginal zone lymphoma, IC_{50}=0.15 μM)[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Marginal zone lymphoma, mantle cell lymphoma, activated B-cell like diffuse large B cell lymphoma, germinal center B-cell-like diffuse large B cell lymphoma cells
Concentration:	0.15-10 μM
Incubation Time:	72 h
Result:	Inhibited different lymphomas, with IC_{50}s of 0.15 μM (Marginal zone lymphoma); 0.5 μM (mantle cell lymphoma); 0.6 μM (activated B-cell like diffuse large B cell lymphoma); 0.7 μM (germinal center B-cell-like diffuse large B cell lymphoma), respectively.

REFERENCES

[1]. Marilia Barreca, et al. Development of [1,2]oxazoloisoindoles tubulin polymerization inhibitors: Further chemical modifications and potential therapeutic effects against lymphomas, European Journal of Medicinal Chemistry. 2022, 114744, ISSN 0223-5234.

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

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