Tubulin polymerization-IN-33

Cat. No.: HY-151394

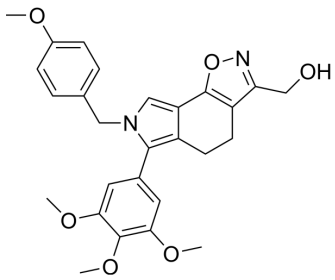
Molecular Formula: $C_{27}H_{28}N_2O_6$

Molecular Weight: 476.52

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-33 is an inhibitor of [1,2]oxazoloisoindoles tubulin polymerization, exhibits high antiproliferative activity against the NCI panel[1].
IC_{50} & Target	[1,2]oxazoloisoindoles tubulin polymerization[1]

In Vitro

Tubulin polymerization-IN-33 (compound 15K) (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 0.03 μM to 17.7 μM, and a mean graph_mid point (MG_MID) values of 0.49 μM[1].

Tubulin polymerization-IN-33 (0.15-10 μM; 72 h) shows potent growth inhibitory effects on different lymphoma lines[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 1.6 μM (Marginal zone lymphoma); 1.4 μM (mantle cell lymphoma); 1.7 μM (activated B-cell like diffuse large B cell lymphoma); 1.8 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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