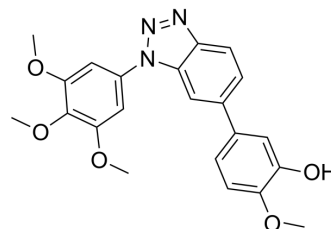


Tubulin polymerization-IN-61

Cat. No.:	HY-161338
CAS No.:	2758114-60-0
Molecular Formula:	C ₂₂ H ₂₁ N ₃ O ₅
Molecular Weight:	407.42
Target:	Microtubule/Tubulin; Apoptosis
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Tubulin polymerization-IN-61 (Compound 9a) is a tubulin polymerization inhibitor. Tubulin polymerization-IN-61 destroys the microtubule skeleton, blocks the cell cycle in G2/M phase, induces Apoptosis, and inhibits cancer cell migration and colony formation. Tubulin polymerization-IN-61 shows antitumor activity in vivo against 4T1 xenograft model ^[1] .
In Vitro	Tubulin polymerization-IN-61 shows antiproliferative activity against three human cancer cell lines (MCF-7, SGC-7901 and A549), with IC ₅₀ values ranging from 14 to 45 nM ^[1] . Tubulin polymerization-IN-61 (20-60 nM, 24 h) increases the proportion of MCF-7 cells in G2/M cycle from 14% to 50%, induces apoptosis, and inhibits MCF-7 cells migration and colony formation ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Tubulin polymerization-IN-61 (5 or 15 mg/kg, i.v., every two days for 2 weeks) shows anti-tumor effects in BALB/c mice 4T1 xenograft tumor model, with negligible toxicity ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mingxin Huang, et al. Structure-based approaches for the design of 6-aryl-1-(3,4,5-trimethoxyphenyl)-1H-benzo[d][1,2,3]triazoles as tubulin polymerization inhibitors. European Journal of Medicinal Chemistry. Volume 269, 5 April 2024, 116309.

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

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