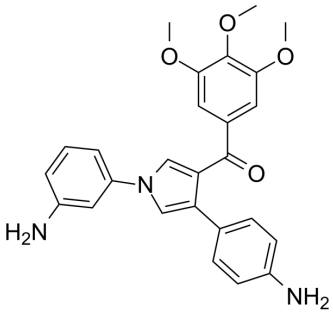
Anticancer agent 48

Cat. No.:	HY-146357
CAS No.:	2395009-13-7
Molecular Formula:	$C_{26}H_{25}N_3O_4$
Molecular Weight:	443.49
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	Anticancer agent 48 (compound 48) is a broad spectrum anticancer agent. Anticancer agent 48 inhibits tubulin polymerization. Anticancer agent 48 shows antiproliferative activity. Anticancer agent 48 shows antitumor activity in vivo. Anticancer agent 48 has the potential for the research of solid and hematological tumors[1].
In Vitro	Anticancer agent 48 (compound 48) inhibits tubulin polymerization and MCF-7 cancer cell growth with IC_{50}s of 0.47 μM and 14 nM, respectively[1]. Anticancer agent 48 shows antiproliferative activity with IC_{50}s of 8, 10, 12, 14, 16 nM for KU812, LAMA84-S, LAMA84-R, KBM5-WT, KBM5-T315I cells, respectively[1]. Anticancer agent 48 shows growth inhibition with IC_{50}s of 12, 31, 37, 221, 56, 27, 51, 48, 28, 12 nM for U343G, U87MG, T98G, SK-N-BE, SK-N-BE(2)-C, HT29, HCT116, SW480, SW620, T24 cell, respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Anticancer agent 48 (20 mg/kg; i.p.; every 2 days for 40 days) shows antitumor effects[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	8 week-old female BALB/$C^{nu/nu}$ mice (EZ-2 or T24 cells)[1]
Dosage:	20 mg/kg
Administration:	I.p.; every 2 days for 40 days
Result:	Significantly inhibited cancer cell proliferation, in vivo tumorigenesis, and tumor angiogenesis.

REFERENCES

[1]. Puxeddu M, et al. Structure-activity relationship studies and in vitro and in vivo anticancer activity of novel 3-aroyl-1,4-diarylpyrroles against solid tumors and hematological malignancies. Eur J Med Chem. 2020 Jan 1;185:111828.

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

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