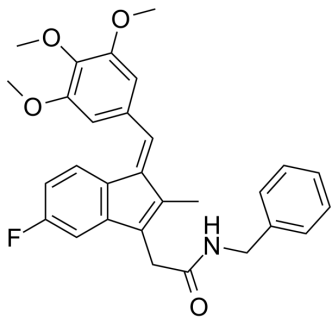
OSIP-486823

Cat. No.:	HY-U00004
CAS No.:	200803-37-8
Molecular Formula:	$C_{29}H_{28}FNO_4$
Molecular Weight:	473.54
Target:	Microtubule/Tubulin
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	OSIP-486823 is a novel microtubule-interfering agent with distinct biological effects on both protein kinase G (PKG) and microtubules.
IC_{50} & Target	Microtubule[1]
In Vitro	OSIP486823 inhibits growth and induce apoptosis in SW480 human colon cancer cells, with IC_{50} of 0.1 μM. OSIP-486823 (OSIP486823) causes depolymerization of microtubules in interphase cells, inhibit spindle formation in mitotic cells, and induce multinucleated cells. Exisulind and the potent synthetic derivative OSIP-486823 are members of a new class of drugs known as selective apoptotic antineoplastic drugs that target cyclic guanosine 3′,5′-monophosphate phosphodiesterases (cGMP-PDE). OSIP-486823 also disrupts microtubule polymerization, perturbs mitotic spindle function, and arrests cells in mitosis in human glioma cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Cell Assay [1]	The SW480 human colon adenocarcinoma and NIH3T3 mouse fibroblast cell lines are seeded in six-well plates at a density of 3×10^4 per well, grown for 36 to 48 hours, and then exposed to increasing concentrations of each compound (e.g., OSIP-486823; 1, 2 and 4 μM) for 48 hours. Cell numbers are determined using a Coulter counter and results are expressed as a percentage of the control culture. All assays are done in triplicate. Data are analyzed in Excel and the IC_{50}s are determined graphically from cell survival curves[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Xiao D, et al. The sulindac derivatives OSI-461, OSIP486823, and OSIP487703 arrest colon cancer cells in mitosis by causing microtubule depolymerization. Mol Cancer Ther. 2006 Jan;5(1):60-7.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA