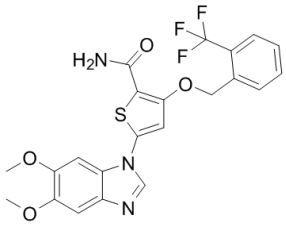
Product Name	:	GW843682X
Synonyms	:	GW843682
Cat No.	:	M21895
CAS Number	:	660868-91-7
Molecular Formula	:	C22H18F3N3O4S
Formula Weight	:	477.46
Chemical Name	:	——
Description	:	GW843682X is effective on inhibition of growth of tumor cells, with IC50s of 0.41, 0.57, 0.11, 0.38, and 0.70 μM for A549, BT474, HeLa, H460 and HCT116 cell lines. GW843682X dose-dependently inhibits PLK1 phosphorylation of Ser15-p53, with an IC50 of 0.14 μM. GW843682X (3 μM) causes a strong G2-M arres in HDF cells and H460 cells after treatment for 24, 48, and 72 h. GW843682X (5 μM) leads to apoptosis in H460 cells instead of HDF cells. GW843682X inhibits proliferation of U937 cells with an EC50 of 120 nM. GW843682X (500 nM) in combination with 5 μM VP-16 suppresses 50% of entry into mitosis in U937 cells. GW843682X (0.06-1μM) has inhibitory activities against proliferation of acute leukemia cells, and potentiates the anti-proliferative activity of vincristine. Moreover, GW843682X (0.1-1μM) induces apoptosis of leukemia cells in a dose- and time-dependent manner. GW843682X (0.5-1μM) dephosphorylates Bcl-xl in leukemia cells.
Pathway	:	Cell Cycle/DNA Damage
Target	:	PLK
Receptor	:	PLK1/PDGFR1β/VEGFR2/CDK2/cyclin A
Solubility	:	DMSO : 33.33 mg/mL (69.81 mM; Need ultrasonic); H2O : < 0.1 mg/mL (insoluble)
SMILES	:	O=C(C1=C(OCC2=CC=CC=C2C(F)(F)F)C=C(N3C4=CC(OC)=C(OC)C=C4N=C3)S1)N
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	



1. Lansing TJ, et al. In vitro biological activity of a novel small-molecule inhibitor of polo-like kinase 1. Mol Cancer Ther. 2007 Feb;6(2):450-9. Epub 2007 Jan 31. 2. Didier C, et al. Evaluation of Polo-like Kinase 1 inhibition on the G2/M checkpoint in Acute Myelocytic Leukaemia. Eur J Pharmacol. 2008 Sep 4;591(1-3):102-5. 3. Ikezoe T, et al. A novel treatment strategy targeting polo-like kinase 1 in hematological malignancies. Leukemia. 2009 Sep;23(9):1564-76.