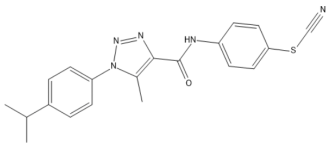
Anticancer agent 83

Cat. No.:	HY-151426
CAS No.:	904815-29-8
Molecular Formula:	$C_{20}H_{19}N_5OS$
Molecular Weight:	377.46
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Anticancer agent 83 is a potent anticancer agent, inhibits LOX IMVI cells growth with a GI_{50} value of 0.15 mM. Anticancer agent 83 reduces mitochondrial membrane potential and induces DNA damage to induces leukemia cells apoptosis[1].

In Vitro

Anticancer agent 83 (compound 4a) (0.01-100 μM; 24 h) showing strong activity towards human colon carcinoma HCT116 $p53^{-/-}$ cells with deletion of P53 gene (GI_{50}=8.4 μM), human epidermoid cervix carcinoma KB3-1 (GI_{50}=7.4 μM), human ovarian carcinoma Skov 3 cells (GI_{50}=10 μM), and human chronic myelogenous leukemia K562 cells (GI_{50}=5.4 μM)[1]. Anticancer agent 83 (0.5 μM; 24 h) interrupts DNA stability and induction of apoptosis in Jurkat cells, and decreases mitochondrial membrane potential[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Human colon carcinoma HCT116 p53−/− cells with deletion of P53 gene, human epidermoid cervix carcinoma KB3-1, human ovarian carcinoma Skov 3 cells, and human chronic myelogenous leukemia K562 cells
Concentration:	0.01, 0.1, 1, 10, 100 μM
Incubation Time:	24 hours
Result:	Inhibited cell viability in different cells with GI_{50}s of 8.4 M (HCT116 $p53^{-/-}$), 7.4 M (KB3-1), 10 M (Skov 3), and 5.4 M (K562), respectively.

Immunofluorescence[1]

Cell Line:	Jurkat cells
Concentration:	0.5 μM
Incubation Time:	24 hours
Result:	Induced morphological changes (including apoptotic bodies, membrane blebbing, chromatin condensation), and DNA fragmentation in Jurkat T-cells.

REFERENCES

[1]. Pokhodylo N, et al. Novel N-(4-thiocyanatophenyl)-1H-1,2,3-triazole-4-carboxamides exhibit selective cytotoxic activity at nanomolar doses towards human leukemic T-cells. Eur J Med Chem. 2022 Nov 5;241:114633.

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