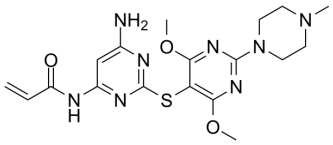
YK5

Cat. No.:	HY-120909
CAS No.:	1268273-23-9
Molecular Formula:	$C_{18}H_{24}N_8O_3S$
Molecular Weight:	432.5
Target:	HSP; Apoptosis
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	YK5 is a potent and selective Hsp70 inhibitor. YK5 selectively and tightly binds to the cytosolic Hsp70s in cancer cells. YK5 has biological activity partly by interfering with the formation of active oncogenic Hsp70/Hsp90/client protein complexes[1].

IC_{50} & Target	HSP70	HSP90

In Vitro

YK5 shows selectively and tightly binds to the cytosolic Hsp70s[1].

YK5 (0.5, 1, 5 μM; 72 h) degrades the expression of Hsp90/Hsp70-onco-client proteins and also leads to the inhibition of cell proliferation in SKBr3 cells[1].

YK5 (0.5, 1, 5 μM; 24 h) induces the degradation of HER2, Raf-1, Akt kinases, and also induces apoptosis in SKBr3 cells[1].

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

Cell Proliferation Assay[1]

Cell Line:	SKBr3 cells
Concentration:	0.5, 1, 5 μM
Incubation Time:	72 h
Result:	Degraded the expression of Hsp90/Hsp70-onco-client proteins and also led to the inhibition of cell proliferation in SKBr3 cells.

Western Blot Analysis[1]

Cell Line:	SKBr3 cells
Concentration:	0.5, 1, 5 μM
Incubation Time:	24 h
Result:	Induced the degradation of HER2, Raf-1, Akt kinases, and also induced apoptosis in SKBr3 cells.

REFERENCES

[1]. Rodina A, et al. Identification of an allosteric pocket on human hsp70 reveals a mode of inhibition of this therapeutically important protein. Chem Biol. 2013 Dec 19;20(12):1469-80.

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