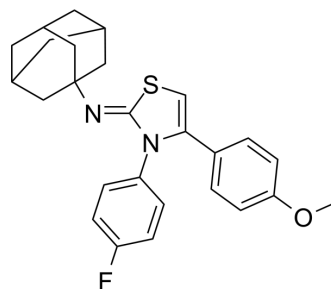


Antiproliferative agent-18

Cat. No.:	HY-152091
CAS No.:	2882206-14-4
Molecular Formula:	C ₂₆ H ₂₇ FN ₂ OS
Molecular Weight:	434.57
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Antiproliferative agent-18 (Compound 5k) is an anti-proliferative agent. Antiproliferative agent-18 also displays moderate anti-bacterial and anti-fungi activity ^[1] .								
IC₅₀ & Target	Bacteria, Fungi ^[1]								
In Vitro	<p>Antiproliferative agent-18 (Compound 5k) (200 µg/ /8 mm disc; 24 h for bacteria, 48 h for fungi) displays moderate antibacterial activity (growth inhibition zones 14–17 mm) and is moderately active against the yeast-like pathogenic fungus <i>Candida albicans</i> (growth inhibition zone 17 mm)^[1].</p> <p>Antiproliferative agent-18 (0.1-100 µM; 48 h) shows anti-proliferative activity against human prostate cancer (PC-3), colorectal carcinoma (HCT-116), hepatocellular carcinoma (HepG-2), epithelioid cervical carcinoma (HeLa) and mammary gland breast cancer (MCF-7) cell lines^[1].</p> <p>Antiproliferative agent-18 occupies the positions of NAD cofactor and the histone deacetylase inhibitor EX527 at the active site of SIRT1 enzyme^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Proliferation Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>PC-3, HCT-116, HepG-2, HeLa and MCF-7 cells</td> </tr> <tr> <td>Concentration:</td> <td>0.1-100 µM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Showed anti-proliferative activity with IC₅₀s of 9.71 ± 0.8, 6.47 ± 0.5, 11.27 ± 0.9, 7.09 ± 0.5 and 3.51 ± 0.2 µM against PC-3, HCT-116, HepG-2, HeLa and MCF-7 cells, respectively.</td> </tr> </table>	Cell Line:	PC-3, HCT-116, HepG-2, HeLa and MCF-7 cells	Concentration:	0.1-100 µM	Incubation Time:	48 h	Result:	Showed anti-proliferative activity with IC ₅₀ s of 9.71 ± 0.8, 6.47 ± 0.5, 11.27 ± 0.9, 7.09 ± 0.5 and 3.51 ± 0.2 µM against PC-3, HCT-116, HepG-2, HeLa and MCF-7 cells, respectively.
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REFERENCES

[1]. Warda ET, et al. Synthesis and in vitro antibacterial, antifungal, anti-proliferative activities of novel adamantane-containing thiazole compounds. *Sci Rep.* 2022 Dec 6;12(1):21058.

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

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