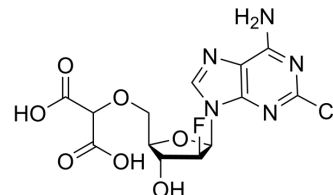


BK50164

Cat. No.:	HY-150048
CAS No.:	2204291-78-9
Molecular Formula:	C ₁₃ H ₁₃ ClFN ₅ O ₇
Molecular Weight:	405.72
Target:	CD73; Apoptosis
Pathway:	Immunology/Inflammation; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	BK50164 is a potent CD73 inhibitor with an IC ₅₀ value of 13.089 μM. BK50164 binds to CD99 with a K _D value of 1.5 μM. BK50164 shows antiproliferative activity. BK50164 induced Apoptosis and cell cycle arrest at Sub-G1 phase ^[1] .																
IC₅₀ & Target	IC ₅₀ : 13.089 μM (CD73) ^[1]																
In Vitro	<p>BK50164 (0-400 μM; 48 h) shows antiproliferative activity with IC₅₀s of 35.8, 34.28, 5.17, ≥400, ≥400 μM for A4573, TC-32, TC-71, Saos-2, U-2 OS cells, respectively^[2].</p> <p>BK50164 (4-16 μM; 48 h) induces apoptosis and cell cycle arrest at Sub-G1 phase^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>A4573, TC-32, TC-71, Saos-2, U-2 OS cells</td> </tr> <tr> <td>Concentration:</td> <td>0-400 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited cell viability with IC₅₀s of 35.8, 34.28, 5.17, ≥400, ≥400 μM for A4573, TC-32, TC-71, Saos-2, U-2 OS cells, respectively.</td> </tr> </table> <p>Cell Cycle Analysis^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>TC-32, U-2 OS cells</td> </tr> <tr> <td>Concentration:</td> <td>4, 8, 16 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Induced apoptosis in only TC-32 ES cells but not in U-2 OS cell line and induces cell cycle arrest at Sub-G1 phase.</td> </tr> </table>	Cell Line:	A4573, TC-32, TC-71, Saos-2, U-2 OS cells	Concentration:	0-400 μM	Incubation Time:	48 h	Result:	Inhibited cell viability with IC ₅₀ s of 35.8, 34.28, 5.17, ≥400, ≥400 μM for A4573, TC-32, TC-71, Saos-2, U-2 OS cells, respectively.	Cell Line:	TC-32, U-2 OS cells	Concentration:	4, 8, 16 μM	Incubation Time:	48 h	Result:	Induced apoptosis in only TC-32 ES cells but not in U-2 OS cell line and induces cell cycle arrest at Sub-G1 phase.
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REFERENCES

[1]. Roland Joseph Billedeau, et al. Ectonucleotidase inhibitors and methods of use thereof. WO2018119284A1.

[2]. Balaraman K, et al. Design, synthesis and biological evaluation of Nucleosidic CD99 inhibitors that selectively reduce Ewing sarcoma viability. Eur J Med Chem. 2023 May 5;251:115244.

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

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