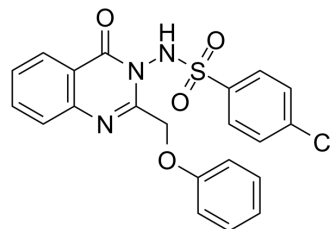


## CDK2-IN-9

<b>Cat. No.:</b>	HY-144811
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>16</sub> ClN <sub>3</sub> O <sub>4</sub> S
<b>Molecular Weight:</b>	441.89
<b>Target:</b>	CDK; Apoptosis
<b>Pathway:</b>	Cell Cycle/DNA Damage; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	CDK2-IN-9 is a potent CDK2 inhibitor with an IC <sub>50</sub> of 0.63 μM. CDK2-IN-9 shows antiproliferative activity. CDK2-IN-9 induces apoptosis and cell cycle arrest at S and G2/M phase. CDK2-IN-9 has the potential for the research of melanoma <sup>[1]</sup> .																
<b>IC<sub>50</sub> &amp; Target</b>	CDK2 0.63 μM (IC <sub>50</sub> )																
<b>In Vitro</b>	<p>CDK2-IN-9 (compound 5c) shows antiproliferative activity with IC<sub>50</sub>s of 3.03, 8.62, 62.52 μM for MDA-MB-435, SNB-75, WI-38 cells, respectively<sup>[1]</sup>.</p> <p>CDK2-IN-9 (24 h) induces apoptosis and cell cycle arrest in S and G2/M phase<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Apoptosis Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>MDA-MB-435, SNB-75 cells</td> </tr> <tr> <td>Concentration:</td> <td>3.03 for MDA-MB-435 cells, 8.62 for SNB-75 cells</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Induced apoptosis in MDA-MB-435 and SNB-75 cells with the percent of the total apoptosis of 28.65 and 44.22%, respectively.</td> </tr> </table> <p>Cell Cycle Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>MDA-MB-435, SNB-75 cells</td> </tr> <tr> <td>Concentration:</td> <td></td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Induced cell cycle arrest at S phase and G2/M.</td> </tr> </table>	Cell Line:	MDA-MB-435, SNB-75 cells	Concentration:	3.03 for MDA-MB-435 cells, 8.62 for SNB-75 cells	Incubation Time:	24 h	Result:	Induced apoptosis in MDA-MB-435 and SNB-75 cells with the percent of the total apoptosis of 28.65 and 44.22%, respectively.	Cell Line:	MDA-MB-435, SNB-75 cells	Concentration:		Incubation Time:	24 h	Result:	Induced cell cycle arrest at S phase and G2/M.
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### REFERENCES

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[1]. Mohammed ER, et al. Development of newly synthesised quinazolinone-based CDK2 inhibitors with potent efficacy against melanoma. J Enzyme Inhib Med Chem. 2022 Dec;37(1):686-700.

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

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