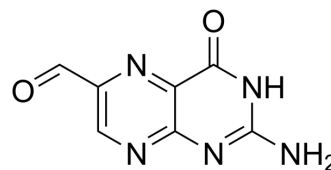


## 6-Formylpterin

<b>Cat. No.:</b>	HY-113978
<b>CAS No.:</b>	712-30-1
<b>Molecular Formula:</b>	C <sub>7</sub> H <sub>5</sub> N <sub>5</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	191.15
<b>Target:</b>	Reactive Oxygen Species; Xanthine Oxidase; Xanthine Oxidase; Apoptosis
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	6-Formylpterin is an inhibitor of Xanthine Oxidase. 6-Formylpterin induces intracellular ROS generation and apoptosis in HL-60 cells. 6-Formylpterin suppresses cell proliferation in PanC-1 cells <sup>[1]</sup> .								
<b>In Vitro</b>	<p>6-Formylpterin (2 mM) generates intracellular ROS in HL-60 cells<sup>[1]</sup>.</p> <p>6-Formylpterin (0.5, 1, and 2 mM, 3 h) increases intracellular H<sub>2</sub>O<sub>2</sub>, which induces apoptosis in HL-60 cells and Jurkat cells<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>HL-60 cells, Jurkat cells</td> </tr> <tr> <td>Concentration:</td> <td>0.5, 1, and 2 mM</td> </tr> <tr> <td>Incubation Time:</td> <td>3 h</td> </tr> <tr> <td>Result:</td> <td>Induced apoptosis in HL-60 cells<sup>[1]</sup>. Inhibited Fas-mediated apoptosis in Jurkat cells in 0.5 mM<sup>[1]</sup>.</td> </tr> </table>	Cell Line:	HL-60 cells, Jurkat cells	Concentration:	0.5, 1, and 2 mM	Incubation Time:	3 h	Result:	Induced apoptosis in HL-60 cells <sup>[1]</sup> . Inhibited Fas-mediated apoptosis in Jurkat cells in 0.5 mM <sup>[1]</sup> .
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Concentration:	0.5, 1, and 2 mM								
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Result:	Induced apoptosis in HL-60 cells <sup>[1]</sup> . Inhibited Fas-mediated apoptosis in Jurkat cells in 0.5 mM <sup>[1]</sup> .								

### REFERENCES

[1]. Arai T, et al. 6-formylpterin, a xanthine oxidase inhibitor, intracellularly generates reactive oxygen species involved in apoptosis and cell proliferation. Free Radic Biol Med. 2001 Feb 1;30(3):248-59.

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

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