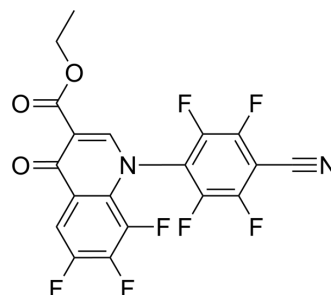


## STAT3-IN-5

<b>Cat. No.:</b>	HY-112447
<b>CAS No.:</b>	1041438-68-9
<b>Molecular Formula:</b>	C <sub>19</sub> H <sub>7</sub> F <sub>7</sub> N <sub>2</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	444.26
<b>Target:</b>	STAT
<b>Pathway:</b>	JAK/STAT Signaling; Stem Cell/Wnt
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	STAT3-IN-5 is a potent STAT3 inhibitor. STAT3-IN-5 inhibits STAT3-Y705 phosphorylation with an EC <sub>50</sub> value of 170 nM. STAT3-IN-5 inhibits cytokine induced JAK activation. STAT3-IN-5 induces apoptosis. STAT3-IN-5 can be used in research of cancer <sup>[1]</sup> .																
<b>IC<sub>50</sub> &amp; Target</b>	p-STAT3 170 nM (EC50)																
<b>In Vitro</b>	<p>STAT3-IN-5 (compound 8; 0-2 μM; 1 h) inhibits STAT3 phosphorylation in U266 cells<sup>[1]</sup>.</p> <p>STAT3-IN-5 (0-2 μM; 1 h) inhibits cytokines induced phosphorylation of JAK1, JAK2, and Tyk2 in U266 cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>U266 cells</td> </tr> <tr> <td>Concentration:</td> <td>0-2 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>1 hours</td> </tr> <tr> <td>Result:</td> <td>Inhibited cytokine induced phosphorylation of JAK1, JAK2, and Tyk2 (P-JAK1-Y1022/1023, P-JAK2-Y1007/1008, P-Tyk2-Y1054/1055).</td> </tr> </table> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>U266 cells</td> </tr> <tr> <td>Concentration:</td> <td>0-2 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>1 hours</td> </tr> <tr> <td>Result:</td> <td>Inhibited STAT3 phosphorylation in a dose-dependent manner.</td> </tr> </table>	Cell Line:	U266 cells	Concentration:	0-2 μM	Incubation Time:	1 hours	Result:	Inhibited cytokine induced phosphorylation of JAK1, JAK2, and Tyk2 (P-JAK1-Y1022/1023, P-JAK2-Y1007/1008, P-Tyk2-Y1054/1055).	Cell Line:	U266 cells	Concentration:	0-2 μM	Incubation Time:	1 hours	Result:	Inhibited STAT3 phosphorylation in a dose-dependent manner.
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### REFERENCES

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[1]. Xu J, et, al. Inhibition of the signal transducer and activator of transcription-3 (STAT3) signaling pathway by 4-oxo-1-phenyl-1,4-dihydroquinoline-3-carboxylic acid esters. J Med Chem. 2008 Jul 24;51(14):4115-21.

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

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