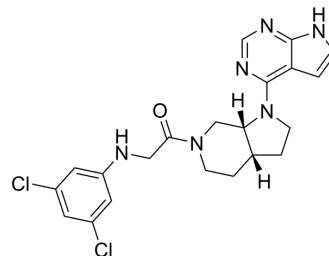


## BTK-IN-19

Cat. No.:	HY-152212
CAS No.:	1374240-01-3
Molecular Formula:	C <sub>21</sub> H <sub>22</sub> Cl <sub>2</sub> N <sub>6</sub> O
Molecular Weight:	445.34
Target:	Btk
Pathway:	Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	BTK-IN-19 (Compound 51) is a reversible BTK inhibitor with an IC <sub>50</sub> of <0.001 μM <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : <0.001 μM (BTK) <sup>[1]</sup>								
<b>In Vitro</b>	<p>BTK-IN-19 (Compound 51) (3 days) inhibits B-cell proliferation with an IC<sub>50</sub> of 0.080 μM<sup>[1]</sup>. BTK-IN-19 (Compound 51) (3 days) IC<sub>50</sub> 0.080 μM<sup>[1]</sup></p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Proliferation Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>B cells enriched from PBMC</td> </tr> <tr> <td>Concentration:</td> <td></td> </tr> <tr> <td>Incubation Time:</td> <td>3 days</td> </tr> <tr> <td>Result:</td> <td>Inhibited B-cell proliferation with an IC<sub>50</sub> of 0.080 μM.</td> </tr> </table>	Cell Line:	B cells enriched from PBMC	Concentration:		Incubation Time:	3 days	Result:	Inhibited B-cell proliferation with an IC <sub>50</sub> of 0.080 μM.
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Concentration:									
Incubation Time:	3 days								
Result:	Inhibited B-cell proliferation with an IC <sub>50</sub> of 0.080 μM.								
<b>In Vivo</b>	<p>BTK-IN-19 (Compound 51) (80 mg/kg; i.p.; once) inhibits CD69 in mice<sup>[1]</sup>.</p> <p>BTK-IN-19 (5 mg/kg; p.o.) demonstrates low-moderate in vivo clearance and modest oral exposure (%F &gt; 34) in rats<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>DBA/1 mice<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>80 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>IP, once</td> </tr> <tr> <td>Result:</td> <td>Demonstrated strong inhibition of CD69.</td> </tr> </table>	Animal Model:	DBA/1 mice <sup>[1]</sup>	Dosage:	80 mg/kg	Administration:	IP, once	Result:	Demonstrated strong inhibition of CD69.
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### REFERENCES

[1]. Vandevener GH, et al. Discovery of structural diverse reversible BTK inhibitors utilized to develop a novel in vivo CD69 and CD86 PK/PD mouse model. Bioorg Med Chem

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

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