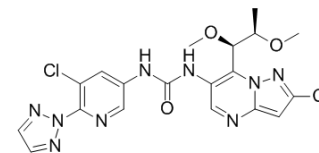


## MLT-748

Cat. No.:	HY-115466
CAS No.:	1832578-30-9
Molecular Formula:	C <sub>19</sub> H <sub>19</sub> Cl <sub>2</sub> N <sub>9</sub> O <sub>3</sub>
Molecular Weight:	492.32
Target:	MALT1
Pathway:	Metabolic Enzyme/Protease; NF-κB
Storage:	Please store the product under the recommended conditions in the COA.



### BIOLOGICAL ACTIVITY

<b>Description</b>	MLT-748 is a potent, selective and allosteric inhibitor of <b>MALT1</b> , binds MALT1 in the allosteric Trp580 pocket, with an IC <sub>50</sub> of 5 nM <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 5 nM (MALT1) <sup>[1]</sup> K <sub>d</sub> : 13 nM (MALT1(329-728)-W580S), 42 nM (MALT1(329-728)) <sup>[1]</sup>								
<b>In Vitro</b>	<p>MLT-748 reversibly binds to human mutant MALT1(329-728)-W580S (K<sub>d</sub>, 13 nM) with affinity similar to that of the wild type MALT1(329-728) (K<sub>d</sub>, 42 nM)<sup>[1]</sup>.</p> <p>MLT-748 (0-2 μM) stabilizes cellular MALT1-W580S, with an EC<sub>50</sub> of 69 nM<sup>[1]</sup>.</p> <p>MLT-748 (2 μM, 24 hours) increases the phosphorylation of p65 and IκBα in MALT1<sup>mut/mut</sup> patient immortalized B cells<sup>[1]</sup>.</p> <p><b>Western Blot Analysis</b></p> <table border="1"> <tr> <td>Cell Line:</td> <td>MALT1<sup>mut/mut</sup> patient immortalized B cells</td> </tr> <tr> <td>Concentration:</td> <td>2 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Increased NF-κB signaling phosphorylation of both p65 and IκBα as early as 5 min after stimulation with PMA and ionomycin.</td> </tr> </table>	Cell Line:	MALT1 <sup>mut/mut</sup> patient immortalized B cells	Concentration:	2 μM	Incubation Time:	24 hours	Result:	Increased NF-κB signaling phosphorylation of both p65 and IκBα as early as 5 min after stimulation with PMA and ionomycin.
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Concentration:	2 μM								
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### REFERENCES

[1]. Quancard J, et al. An allosteric MALT1 inhibitor is a molecular corrector rescuing function in an immunodeficient patient. Nat Chem Biol. 2019 Mar;15(3):304-313.

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

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