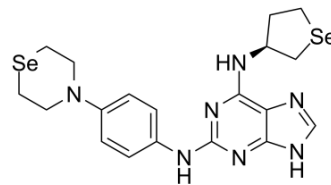


## SLLN-15

Cat. No.:	HY-125465
Molecular Formula:	C <sub>19</sub> H <sub>23</sub> N <sub>7</sub> Se <sub>2</sub>
Molecular Weight:	507.35
Target:	Autophagy
Pathway:	Autophagy
Storage:	Please store the product under the recommended conditions in the COA.



### BIOLOGICAL ACTIVITY

<b>Description</b>	SLLN-15 is an oral active, selective and potent enhancer of <b>autophagy</b> that activates cytosolic macroautophagy/autophagy in triple-negative breast cancer (TNBC) <sup>[1]</sup> .																
<b>In Vitro</b>	<p>SLLN-15 (0, 1, 5, 10, 25 μM) treatment for 24 h markedly decreases overall cell viability of breast cancer cells in a dose-dependent manner<sup>[1]</sup>.</p> <p>SLLN-15 (100 nM and 1000 nM, 7 days) is able to equally inhibit the colony formation abilities of several breast cancer cell lines<sup>[1]</sup>.</p> <p>Overall, SLLN-15 induces a dose-dependent anti-proliferative activity in the TNBC cell lines MDA-MB-231 and BT-20 via induction of autophagy and autophagic flux. This induction is associated with a selective inhibition of AKT-MTOR signaling.</p> <p><b>Cell Viability Assay<sup>[1]</sup></b></p> <table border="1"> <tr> <td>Cell Line:</td> <td>TNBC cell lines BT-20 and MDA-MB-231.</td> </tr> <tr> <td>Concentration:</td> <td>0, 1, 5, 10, 25 μM.</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours.</td> </tr> <tr> <td>Result:</td> <td>Inhibited the proliferation of two TNBC cell lines, BT-20 and MDA-MB-231.</td> </tr> </table> <p><b>Cell Viability Assay<sup>[1]</sup></b></p> <table border="1"> <tr> <td>Cell Line:</td> <td>TNBC cell lines (MDA-MB-231, BT-20, 4T1, MDA-MB-468), MCF-7 (ERBB2<sup>-</sup>), SKBR-3 (ERBB2<sup>+</sup>) and HEK293T.</td> </tr> <tr> <td>Concentration:</td> <td>100 nM and 1000 nM.</td> </tr> <tr> <td>Incubation Time:</td> <td>7 days.</td> </tr> <tr> <td>Result:</td> <td>Equally inhibited the colony formation abilities of several breast cancer cell lines.</td> </tr> </table>	Cell Line:	TNBC cell lines BT-20 and MDA-MB-231.	Concentration:	0, 1, 5, 10, 25 μM.	Incubation Time:	24 hours.	Result:	Inhibited the proliferation of two TNBC cell lines, BT-20 and MDA-MB-231.	Cell Line:	TNBC cell lines (MDA-MB-231, BT-20, 4T1, MDA-MB-468), MCF-7 (ERBB2 <sup>-</sup> ), SKBR-3 (ERBB2 <sup>+</sup> ) and HEK293T.	Concentration:	100 nM and 1000 nM.	Incubation Time:	7 days.	Result:	Equally inhibited the colony formation abilities of several breast cancer cell lines.
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<b>In Vivo</b>	<p>SLLN-15 (30mg/kg, PO, 3 times a week) not only inhibits the growth of TNBC in animal model, but also TNBC cell progression to metastases<sup>[1]</sup>.</p> <p>Overall, oral SLLN-15 reveals a potent anticancer and anti-metastatic activity in mice bearing TNBC<sup>[1]</sup>.</p>																

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<b>Animal Model:</b>	BALB/c mice or SCID mice transplanted with mouse mammary carcinoma 4T1 cells and human breast adenocarcinoma MDA-MB-231 cells (1 X 10 <sup>6</sup> cells/ each mouse) <sup>[1]</sup>
<b>Dosage:</b>	30mg/kg.
<b>Administration:</b>	PO, 3 times a week for 40 days.
<b>Result:</b>	Tumor allografts grew at a slower rate compared to control groups. Significant inhibition of the number of lung metastases as visualized.

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## REFERENCES

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[1]. Chang CH, et al. A novel orally available seleno-purine molecule suppresses triple-negative breast cancer cell proliferation and progression to metastasis by inducing cytosstatic autophagy. *Autophagy*. 2019 Mar 1:1-15.

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

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