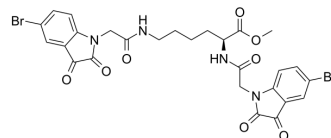


## Antitumor agent-133

Cat. No.:	HY-157548
Molecular Formula:	C <sub>27</sub> H <sub>24</sub> Br <sub>2</sub> N <sub>4</sub> O <sub>8</sub>
Molecular Weight:	692.31
Target:	Autophagy; p62; Atg8/LC3
Pathway:	Autophagy
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Antitumor agent-133 (compound 4d) is a bis-isatin derivative, with activities against Huh1 (IC <sub>50</sub> =17.13 μM) and Huh7 (IC <sub>50</sub> =8.27 μM). Antitumor agent-133 induces cell autophagy and inhibits tumor growth through regulation of LC3BII, ATG5 and p62 proteins <sup>[1]</sup> .								
<b>In Vitro</b>	Antitumor agent-133 (0-100 μM, 48h) exhibits antitumor activities with IC <sub>50</sub> values of 17.13 μM (Huh1) and 8.27 μM (Huh7) and selectivity towards cancer cells <sup>[1]</sup> . Antitumor agent-133 (0-100 μM, 48h) induces cancer cell autophagy through regulating the expressions of LC3B (I and II), ATG5 and p62 <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	Antitumor agent-133 (15 mg/kg, i.p., once every two days for 14 days) inhibits tumor growth in Xenograft model in NCG mice and exhibits low toxicity <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>Huh1 xenograft model in NCG mice<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>i.p., 15 mg/kg, once every two days for 14 days</td> </tr> <tr> <td>Administration:</td> <td>intraperitoneal injection</td> </tr> <tr> <td>Result:</td> <td>Inhibited tumor growth.</td> </tr> </table>	Animal Model:	Huh1 xenograft model in NCG mice <sup>[1]</sup>	Dosage:	i.p., 15 mg/kg, once every two days for 14 days	Administration:	intraperitoneal injection	Result:	Inhibited tumor growth.
Animal Model:	Huh1 xenograft model in NCG mice <sup>[1]</sup>								
Dosage:	i.p., 15 mg/kg, once every two days for 14 days								
Administration:	intraperitoneal injection								
Result:	Inhibited tumor growth.								

### REFERENCES

[1]. Li Z, et al., Synthesis, biological activity evaluation and mechanism of action of novel bis-isatin derivatives as potential anti-liver cancer agents. *Bioorg Med Chem Lett.* 2024 Jan 13;99:129613. doi: 10.1016/j.bmcl.2024.129613

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

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