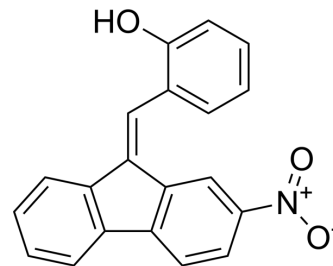


## SMBA1

<b>Cat. No.:</b>	HY-101996
<b>CAS No.:</b>	906440-37-7
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>13</sub> NO <sub>3</sub>
<b>Molecular Weight:</b>	315.32
<b>Target:</b>	Bcl-2 Family
<b>Pathway:</b>	Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	SMBA1 is a potent Bax agonist with a K <sub>i</sub> value of 43.3 nM. SMBA1 enhances the Bax expression. SMBA1 shows anti-tumor activity. SMBA1 has the potential for the research of lung cancer <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	Bax 43.3 nM (K <sub>i</sub> )								
<b>In Vitro</b>	<p>SMBA1 induces conformational changes in Bax by blocking S184 phosphorylation, facilitating Bax insertion into mitochondrial membranes and forming Bax oligomers shows Bax agonist activity<sup>[1]</sup>.</p> <p>.SMBA1 (0, 0.1, 1, 5, 10 μM; 24 h) enhances the Bax expression in a dose-dependent manner in A549 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>A549 cells</td> </tr> <tr> <td>Concentration:</td> <td>0, 0.1, 1, 5, 10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Increased the Bax expression in a dose-dependent manner</td> </tr> </table>	Cell Line:	A549 cells	Concentration:	0, 0.1, 1, 5, 10 μM	Incubation Time:	24 h	Result:	Increased the Bax expression in a dose-dependent manner
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Concentration:	0, 0.1, 1, 5, 10 μM								
Incubation Time:	24 h								
Result:	Increased the Bax expression in a dose-dependent manner								
<b>In Vivo</b>	<p>SMBA1 (2, 10, 40, 60 mg/kg; i.p.; once daily for 10 days) shows anti-tumor activity in mouse<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>6-week-old male Nu/Nu mice (A549 lung cancer xenografts)<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>2, 10, 40, 60 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>i.p.; once daily for 10 days</td> </tr> <tr> <td>Result:</td> <td>Suppressed the tumor volume and increased levels of active caspase 3.</td> </tr> </table>	Animal Model:	6-week-old male Nu/Nu mice (A549 lung cancer xenografts) <sup>[1]</sup>	Dosage:	2, 10, 40, 60 mg/kg	Administration:	i.p.; once daily for 10 days	Result:	Suppressed the tumor volume and increased levels of active caspase 3.
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Result:	Suppressed the tumor volume and increased levels of active caspase 3.								

### REFERENCES

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

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