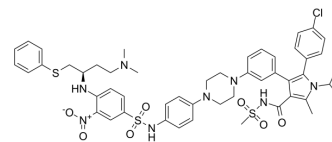


## BM-1074

Cat. No.:	HY-13846
CAS No.:	1391108-10-3
Molecular Formula:	C <sub>50</sub> H <sub>57</sub> ClN <sub>8</sub> O <sub>7</sub> S <sub>3</sub>
Molecular Weight:	1013.69
Target:	Bcl-2 Family; Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	BM-1074 is a potent and specific Bcl-2/Bcl-xL inhibitor with K <sub>i</sub> values of < 1 nM and IC <sub>50</sub> values of 1.8 nM and 6.9 nM for Bcl-2 and Bcl-xL, respectively. BM-1074 induces apoptosis, and exhibits antiproliferative activity against four small-cell lung cancer cell lines (H146, H1963, H187 and H1417) with IC <sub>50</sub> values of 1-2 nM <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	Bcl-2 1.8 nM (IC <sub>50</sub> )	Bcl-xL 6.9 nM (IC <sub>50</sub> )
<b>In Vitro</b>	BM-1074 (Compound 32) shows high binding affinity to both Bcl-2 and Bcl-xL proteins and exhibits inhibitory activity against H146, H1963, H187, and H1417 cell lines <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Proliferation Assay <sup>[1]</sup>	
	Cell Line:	H146, H1963, H187, and H1417
	Concentration:	0-200 nM
	Incubation Time:	4 days
	Result:	Inhibited the cell growth of H146, H1963, H187 and H1417 cell lines with IC <sub>50</sub> values of 1.3 nM, 1.0 nM, 1.4 nM and 2.3 nM, respectively.
<b>In Vivo</b>	BM-1074 (i.v., 15 mg/kg, daily, 5 days a week for 2 weeks) exhibits the maximum tolerated dose (MTD) (15 mg/kg) and strong antitumor activity in H146 tumor xenograft mice, as well as shows no significant weight loss (<5%) or other signs of toxicity [1]. BM-1074 (i.v., 15 mg/kg, single) induces strong apoptosis in H146 tumor tissues <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	SCID mice (injected with 5 x 10 <sup>6</sup> H146 cancer cells with Matrigel, subcutaneously) <sup>[1]</sup>
	Dosage:	15 mg/kg
	Administration:	i.v., 15 mg/kg, daily, 5 days a week for 2 weeks

Result:	Showed good toleration and did not cause significant weight loss or other signs of toxicity, also induced completely and persistent tumor regression in the H146 xenograft model.
Animal Model:	SCID mice (injected with $5 \times 10^6$ H146 cancer cells with Matrigel, subcutaneously) <sup>[1]</sup>
Dosage:	15 mg/kg
Administration:	i.v., 15 mg/kg, single dosage
Result:	Induced robust cleavage of PARP and caspase-3 at both 3 and 6-hr time-points in H146 tumor tissues.

## REFERENCES

[1]. Angelo Aguilar, et al. A potent and highly efficacious Bcl-2/Bcl-xL inhibitor. J Med Chem. 2013 Apr 11;56(7):3048-3067.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA