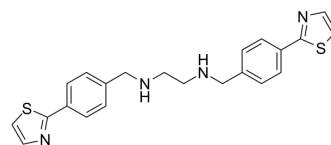


BC-1258

Cat. No.:	HY-129087		
CAS No.:	1507370-40-2		
Molecular Formula:	C ₂₂ H ₂₂ N ₄ S ₂		
Molecular Weight:	406.57		
Target:	Apoptosis		
Pathway:	Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (307.45 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4596 mL	12.2980 mL	24.5960 mL
	5 mM	0.4919 mL	2.4596 mL	4.9192 mL
	10 mM	0.2460 mL	1.2298 mL	2.4596 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

BC-1258, an F-box/LRR-repeat protein 2 (FBXL2) activator, can stabilize and upregulate FBXL2 levels. BC-1258 induces apoptosis of tumorigenic cells, and profoundly inhibits tumor formation in mice^[1].

IC₅₀ & Target

FBXL2^[1]

In Vitro

BC-1258 \uparrow F-box/LRR-repeat protein 2 (FBXL2) \uparrow FBXL2 \uparrow BC-1258 \uparrow FBXL2
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.
 Cell Cycle Analysis^[1]

Cell Line:	MLE cells
Concentration:	2, 10, 50 μ g/mL
Incubation Time:	16 hours

Result:	Significantly increased the cell population within the G2/M phase. Reduced the diploid cell population and increase the numbers of polyploidal cells in a dose-dependent manner.
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Western Blot Analysis^[1]

Cell Line:	U937, K562 and THP1 cells
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Concentration:	2, 10 µg/mL
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Incubation Time:	16 hours
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Result:	Increased FBXL2 protein levels. Decreased FBXL2 substrates, including Aurora B, cyclin D2 and cyclin D3 levels.
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In Vivo

BC-1258 (30 µg/mL in the drinking water) significantly reduces tumor size and weight in athymic nude mice^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chen BB, et, al. Skp-cullin-F box E3 ligase component FBXL2 ubiquitinates Aurora B to inhibit tumorigenesis. Cell Death Dis. 2013 Aug 8;4(8):e759.

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

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