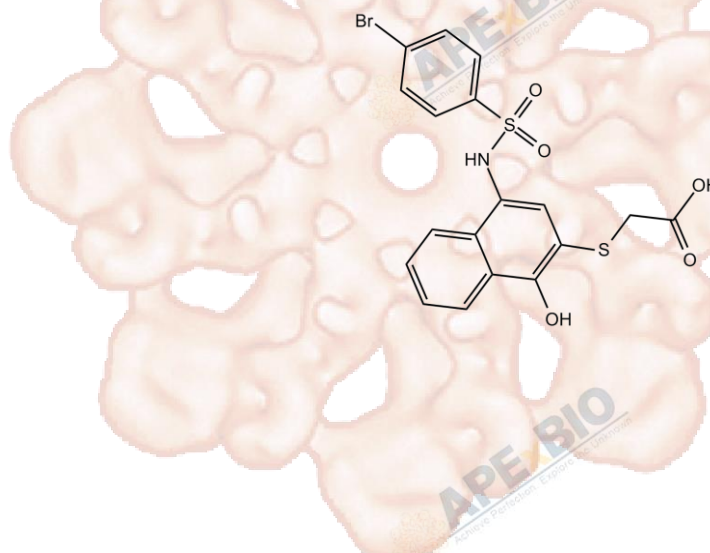


Product Data Sheet

UMI-77

Cat. No.:	B4881
CAS No.:	518303-20-3
Formula:	C ₁₈ H ₁₄ BrNO ₅ S ₂
M.Wt:	468.34
Synonyms:	
Target:	Apoptosis
Pathway:	Bcl-2 Family
Storage:	Store at -20°C



Solvent & Solubility

≥23.4 mg/mL in DMSO; insoluble in H₂O; ≥7.2 mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Mass			
	Solvent Concentration	1mg	5mg	10mg
	1 mM	2.1352 mL	10.6760 mL	21.3520 mL
	5 mM	0.4270 mL	2.1352 mL	4.2704 mL
	10 mM	0.2135 mL	1.0676 mL	2.1352 mL

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

Biological Activity

Shortsummary

Mcl-1 inhibitor, novel

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:	Pancreatic cancer (PC) cells
Preparation method:	Limited solubility. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	~24 h

	Applications:	UMI-77 inhibits growth of PC cells, especially for the BxPC-3 and Panc-1 cell line with highest potency. In Panc-1 cells, UMI-77 also effectively induces apoptosis in a time-dependent and dose-dependent manner. Moreover, it leads to a dose-dependent release of cytochrome c and Smac from mitochondria. In addition, the growth inhibition and apoptosis effects of UMI-77 is abrogated by knocking down Mcl-1 expression
In Vivo	Animal experiment	
	Animal models:	BxPC-3 xenograft model in SCID mice
	Dosage form:	60 mg/kg i.v.
	Applications:	UMI-77 treatment for 5 consecutive days a week for two weeks significantly inhibits the tumor growth by 65% and 56%. UMI-77 also markedly increases the positive apoptotic cells of tumor sections comparing with the control cohorts.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Robinson EJ, Aguiar SP, et al. "Survival of midbrain dopamine neurons depends on the Bcl2 factor Mcl1." Cell Death Discov. 2018 Nov 21;4:107.PMID:30479840

See more customer validations on www.apexbt.com.

References

1. Abulwerdi F, Liao C, Liu M et al. A novel small-molecule inhibitor of mcl-1 blocks pancreatic cancer growth in vitro and in vivo. Mol Cancer Ther. 2014 Mar;13(3):565-75.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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