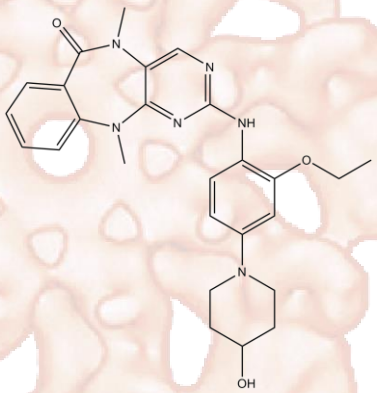
Product Data Sheet

XMD8-92



Cat. No.:	A3943
CAS No.:	1234480-50-2
Formula:	C26H30N6O3
M.Wt:	474.57
Synonyms:	
Target:	MAPK Signaling
Pathway:	ERK
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

≥23.75 mg/mL in DMSO,insoluble in EtOH,insoluble in H2O

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1mg	5mg	10mg
1 mM	2.1072 mL	10.5359 mL	21.0717 mL
5 mM	0.4214 mL	2.1072 mL	4.2143 mL
10 mM	0.2107 mL	1.0536 mL	2.1072 mL

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

Biological Activity

Shortsummary	BMK1/ERK5 inhibitor,highly selective
IC_{50} & Target	Kd=80 nM (BMK1/ERK5)

In Vitro

Cell Viability Assay

Cell Line:	Human pancreatic cancer AsPC-1 cell line
Preparation method：	The solubility of this compound in DMSO is >23.8 mg/ml. 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:	10 and 15 μM for 48 h
Applications:	Significant dose-dependent downregulation of DCLK1 mRNA and protein were

		observed following treatment with 10 and 15 μM of XMD8-92. Furthermore, a nearly 60% reduction in c-MYC, KRAS and NOTCH1 mRNA in AsPC-1 cells treated with XMD8-92 was also found. These data demonstrated that treatment AsPC-1 cells with XMD8-92 led to downregulation of DCLK1, c-MYC, KRAS and NOTCH1 mRNA.
In Vivo	**Animal experiment**	
	Animal models:	HeLa, A549 and LL/2 xenograft mouse model
	Dosage form:	50 mg/kg twice a day
	Applications:	It was found that vehicle-treated tumors grew exponentially throughout the experiment, whereas treatment with XMD8-92 not only arrested the tumor growth but resulted in decrease in the tumor volume. Moreover, treatment with XMD8-92 resulted in a significant (>80%) reduction in tumor volume compared to control tumors. In addition, more than 2-fold decrease in the tumor weight following treatment with XMD8-92 was observed.
	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. White SM, Avantaggiati ML, et al. "YAP/TAZ Inhibition Induces Metabolic and Signaling Rewiring Resulting in Targetable Vulnerabilities in NF2-Deficient Tumor Cells." Dev Cell. 2019 May 6;49(3):425-443.e9.PMID:31063758

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References

[1] Sureban SM et al. XMD8-92 inhibits pancreatic tumor xenograft growth via a DCLK1-dependent mechanism. Cancer Lett. 2014 Aug 28;351(1):151-61.

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 APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm 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.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com