Actinomycin D；Dactinomycin

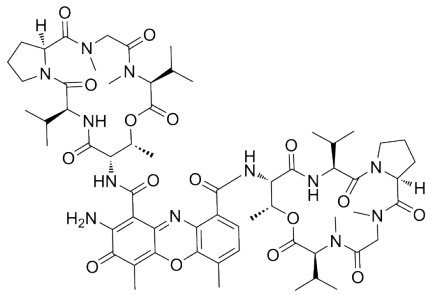
产品编号：MB2221

质量标准：≥98%,BR

包装规格：5MG

产品形式：powder

基本信息

分子式	C62H86N12O16	结构式	
分子量	1255.42		
CAS No.	50-76-0		
储存条件	-20℃，避光防潮密闭干燥		
溶解性 (25°C)	DMSO: 20 mg/mL		
注意事项	溶解性是在室温下测定的，如果温度过低，可能会影响其溶解性。		
其他说明	为了您的安全和健康，请穿实验服并戴一次性手套操作。		

简介：放线菌素 D 是一种多肽抗生素，与双链 DNA 结合形成稳定复合物，从而抑制 DNA 修复，还会导致 DNA 的单链断裂，抑制 RNA 的合成，作用于 mRNA 干扰细胞的转录过程，还可使细胞周期停滞在 G1 期，进而抑制细胞增殖。

物理性状及指标：

产品形式：……鲜红色结晶粉末

溶解性 ：……DMSO: 20 mg/mL

Assay ：……≥98%,BR

生物活性：来源公开文献仅供参考

IC_{50} & Target	DNA repair
In Vitro	Neuroblastoma cell lines with different p53 genetic background were employed to determine the response on cell viability and apoptosis of low-dose of actinomycin D. Subcutaneously-implanted SK-N-JD derived neuroblastoma tumors were used to assess the effect of low-doses of actinomycin D on tumor formation[1].
In Vivo	Three animals received an intravenous bolus injection of 0.5mg/kg actinomycin D in 0.125 mL per mouse (25 g) of a 0.1 mg/mL dosing solution. This dosage corresponds to the usual therapy protocols in humans according to allometric scaling . Full blood samples were transferred into citrate tubes and centrifuged at 1600× g for 10 min to generate plasma samples, which were stored at −80 °C until analysis. For determination of actinomycin D disposition in the CNS, brain tissue, and plasma samples were harvested following euthanasia with increasing concentrations of CO2 at 2 h (three animals) or 22 h (four

	animals) after intravenous bolus injection of 0.5 mg/KG actinomycin D. Samples were stored at −80 °C until analysis. For validation of the UPLC-MS/MS quantification, blank plasma from 6 naïve mice was used and blank brain tissue was obtained from 2 unexposed mice. Whole brain tissue was homogenized using a Bead Ruptor 4 homogenizer in acetonitrile (ACN)/water (1/19, v/V) + 0.5 % Triton X and 0.1 % formic acid (FA) (100 mg brain tissue/mL) in 2.0 mL tubes containing ~25 glass beads for 2 × 1 min[2].
参考文献	[1] :https://molecular-cancer.biomedcentral.com/articles/10.1186/s12943-015-0489-8 [2] :https://www.mdpi.com/1999-4923/13/9/1498

使用浓度：具体使用浓度请参考相关文献，并根据自身实验条件（如实验目的，细胞种类，培养特性等）进行摸索和优化。

用途及描述：

抑制肿瘤形成

可以用于手术后化疗，与长春新碱、环磷酰胺等合用治疗间充质细胞瘤

【注意】

●我司产品为非无菌包装，若用于细胞培养，请提前做预处理，除去热原细菌，否则会导致染菌。

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