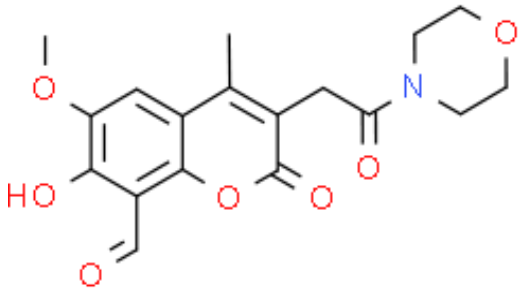
Product Data Sheet

Cas No.:	1338934-59-0	Cat. No:	PL01479
Product Name:	MKC8866		
Product synonym:	-		
Chemical name:	MKC8866		
MF:	C18H19NO7	FW:	361.3460
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	O1CCN(C(CC2C(=O)OC3=C(C=O)C(=C(C=C3C=2C)OC)O)=O)CC1		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

MKC8866 是一种水杨醛类似物，有效的选择性 IRE1 RNase 抑制剂，在体外的 IC_{50} 为 0.29 μM。 MKC8866 强烈抑制 Dithiothreitol 诱导的 XBP1s 表达，EC_{50} 为 0.52 μM。MKC8866 抑制无应激 RPMI 8226 细胞，IC_{50} 为 0.14 μM。 MKC8866 抑制乳腺癌细胞中的 IRE1 RNase 导致促肿瘤发生因子减少，同时也能抑制前列腺癌 (PCa) 肿瘤的生长。

生物活性	MKC8866, a salicylaldehyde analog, is a potent, selective IRE1 RNase inhibitor with an IC 50 of 0.29?μM in human vitro. MKC8866 strongly inhibits Dithiothreitol-induced X-box-binding protein 1-spliced (XBP1s) expression with an EC 50 of 0.52?μM and unstresses RPMI 8226 cells with an IC 50 of 0.14?μM. MKC8866 inhibits IRE1 RNase in breast cancer cells leading to the decreased production of pro-tumorigenic factors and it can inhibits prostate cancer (PCa) tumor growth.
IC50 & Target[1][2]	IC50: 0.29?μM (IRE1 RNase)

体外研究(In Vitro)	MKC8866 (20?μM; 6 days) decreases proliferation of all breast cancer cell lines. MKC8866 (20 μM; 48 hours) reduces the number of cells entering S phase. MKC8866 (0.2-10 μM; 3 days) suppresses the viability of all four cell lines in a dose-dependent manner under normal conditions, with the most robust effect in LNCaP cells. MKC8866 (20 μM; 72?hours) is sufficient to completely block NSC 125973-induced expression of XBP1s . has not independently confirmed the accuracy of these methods. They are for reference only.
体内研究(In Vivo)	MKC8866 (oral ; 300 mg/kg; for 28 days) reduces tumor regrowth post-NSC 125973 withdrawal. has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: Female athymic nude mice with MDA-MB-231 tum
包装储存	Powder -20°C 3 years； 4°C 2 years
溶解度数据	In Vitro: DMSO : 6.67 mg/mL (18.46 mM; ultrasonic and warming and heat to 60°C)配制储备液