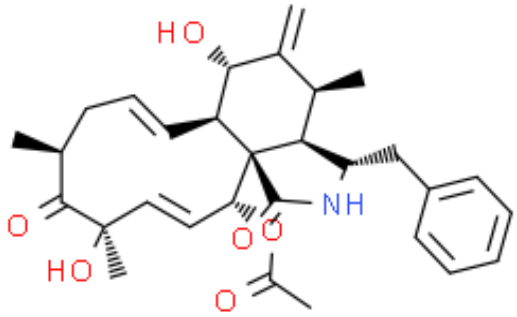
Product Data Sheet

Cas No.:	22144-77-0	Cat. No:	PC15176
Product Name:	Cytochalasin D		
Product synonym:	细胞松驰素D;细胞松弛素 D;胞松弛素D;松胞素 D(RG);松胞素D;松胞菌素C;松胞菌素D;松胞素C;细胞分裂抑素C;细胞松驰素C;细胞松驰素 D		
Chemical name:	Cytochalasin D		
MF:	C30H37NO6	FW:	507.6179
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	O(C(C([H])([H])[H])=O)[C@]1([H])C([H])=C([H])[C@](C([H])([H])[H])(C([C@@]([H])(C([H])([H])[H])[H])C([H])([H])C([H])=C([H])[C@@]2([H])[C@@]([H])(C(=C([H])[H])[C@@]([H])(C([H])([H])[H])[C@@]3([H])[C@]([H])(C([H])([H])C4C([H])=C([H])C([H])=C([H])C=4[H])N([H])C([C@]321)=O)O[H])=O)O[H]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

肌动蛋白聚合抑制剂，Cytochalasin D (Zygosporin A; NSC 209835) 是一种有效、细胞渗透性的肌动蛋白聚合抑制剂，由真菌产生，通过绑定 G-actin 抑制 G-actin–cofilin 的相互作用。Cytochalasin D (Zygosporin A; NSC 209835) 还能抑制 cofilin 与 F-actin 的结合，降低了活细胞中肌动蛋白聚合和解聚的速率。

生物活性	Cytochalasin D (Zygosporin A) is a potent **actin polymerization** inhibitor, could be derived from fungus. Cytochalasin D has cell-permeable activity. Cytochalasin D inhibits the G-actin–cofilin interaction by binding to G-actin. Cytochalasin D also inhibits the binding of cofilin to F-actin and decreases the rate of both actin polymerization and depolymerization in living cells. Cytochalasin D can reduce exosome release, in turn reducing the amount of survivin present in the tumour environment. Cytochalasin D induces phosphorylation and cytoplasmic retention of Yap.

体外研究(In Vitro)

Cytochalasin D (3 and 10 μM; 30 min) causes retraction and arborization of COS-7 cells and conversion of F-actin from long fibers to punctate structures.

Cytochalasin D (0.3, 1, 3 and 10 μM; 30 min) concentration-dependently decreases the rate of actin depolymerization in COS-7 cells.

Cytochalasin D (1 μM; NIH3T3 cells) disrupts stress fibers, induces phosphorylation of Yap, while cells maintains original area and lost nuclear Yap localization.

Medlife has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis

Cell Line:	COS-7 cells
Concentration:	3 and 10 μM
Incubation Time:	30 min
Result:	Caused retraction and arborization of COS-7 cells and conversion of F-actin from long fibers to punctate struct

Western Blot Analysis

Cell Line:	COS-7 cells expressing YFP-actin
Concentration:	0.3, 1, 3 and 10 μM
Incubation Time:	30 min
Result:	Concentration-dependently decreased the rate of actin depolymerization in COS-7 cells.

包装储存

Powder	**-20°C**	3 years
In solvent	**-80°C**	6 months
	-20°C	1 month

溶解度数据

体外研究:

DMSO : 25 mg/mL (49.25 mM; ultrasonic and warming and heat to 60°C)

配制储备溶液	质量 溶剂体积 浓度	1 mg	5 mg	10 mg
	1 mM	1.9700 mL	9.8499 mL	19.6998 mL
	5 mM	0.3940 mL	1.9700 mL	3.9400 mL
	10 mM	0.1970 mL	0.9850 mL	1.9700 mL

* 产品不同，其溶解度不同。建议根据产品选择合适的溶剂配制储备溶液；配成溶液后，**建议分装保存，避免反复冻融造成的产品失效**。

储备液的保存方式和期限： -80°C, 6 months; -20°C, 1 month。-80°C 储存时，建议在 6 个月内使用，-20°C 储存时，建议在 1 个月内使用。