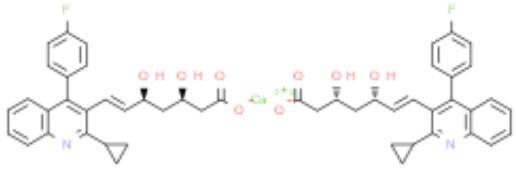
Product Data Sheet

Cas No.:	147526-32-7	Cat. No:	PC12533
Product Name:	Pitavastatin Calcium		
Product synonym:	匹伐他汀钙;伊伐他汀;(+)-双{(3R,5S,6E)-7-[2-环丙基-4-(4-氟代苯基)喹啉-3-基]-3,5-二羟基-6-庚烯酸}钙盐 (2:1);匹伐他汀钙GMP;5-(1H-吲哚基)2-甲基噁唑;阿伐他汀钙;匹伐他汀;匹伐他汀-D4钙盐;匹伐他汀钙盐;双{(3R,5S,6E)-7-[2-环丙基-4-(氟代苯基)喹啉-3-苯基]-3,5-二羟基-6-庚烯酸乙酯}钙盐(2:1);匹法他汀钙;匹伐他汀钙API;匹伐他汀钙无定形;匹伐他汀钙晶型Ⅰ;匹伐他汀钙(标准品);+双{(3R,5S,6E)-7-[2-环丙基-4-(氟代苯基)喹啉-3-苯基]-3,5-二羟基-6-庚烯酸乙酯}钙盐(2:1)		
Chemical name:	Pitavastatin Calcium		
MF:	C25H24FNO4	FW:	421.4608
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	FC1C([H])=C([H])C(=C([H])C=1[H])C1C2=C([H])C([H])=C([H])C([H])=C2N=C(C=1/C(/[H])=C(\[H])/[C@]([H])(C([H])([H])[C@]([H])(C([H])([H])C(=O)O[H])O[H])O[H])C1([H])C([H])([H])C1([H])[H]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

酶HMGCR抑制剂,Pitavastatin Calcium是有效的羟甲基戊二酰-CoA (HMG-CoA) 还原酶抑制剂。Pitavastatin Calcium在HepG2细胞中抑制乙酸合成胆固醇的 IC50 为5.8 nM。

生物活性	Pitavastatin Calcium (NK-104 hemicalcium) is a potent **hydroxymethylglutaryl-CoA (HMG-CoA) reductase** inhibitor. Pitavastatin Calcium (NK-104 hemicalcium) inhibits cholesterol synthesis from acetic acid with an **IC_{50}** of 5.8 nM in HepG2 cells. Pitavastatin Calcium is an efficient hepatocyte low-density lipoprotein-cholesterol (LDL-C) receptor inducer. Pitavastatin Calcium also possesses anti-atherosclerotic, anti-asthmatic, anti-osteoarthritis, antineoplastic, neuroprotective, hepatoprotective and reno-protective effects.
IC50 & Target[1][2]	HMG-CoA Reductase

<table>
<tr><td>体外研究(In Vitro)</td><td>
Pitavastatin Calcium inhibits the growth of a panel of ovarian cancer cells, including those considered most likely to represent HGSOC, grown as a monolayers (IC_{50}?=?0.4-5?μM) or as spheroids (IC_{50}=0.6-4?μM).
Pitavastatin Calcium (1 μM; 48 hours) induces apoptosis, evidenced by the increased activity of executioner caspases-3,7 as well as caspase-8 and caspase-9 in Ovcar-8 cells and Ovcar-3 cells.
Pitavastatin (1?μM, 48?hours) causes PARP cleavage in Ovcar-8 cells.

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

Western Blot Analysis
<table>
<tr><td>Cell Line:</td><td>Ovcar-8 cells</td></tr>
<tr><td>Concentration:</td><td>1?μM</td></tr>
<tr><td>Incubation Time:</td><td>48 hours</td></tr>
<tr><td>Result:</td><td>Induced PARP cleavage.</td></tr>
</table>
</td></tr>
<tr><td>体内研究(In Vivo)</td><td>
Pitavastatin Calcium (59?mg/kg; p.o.; twice daily for 28 days) causes significant tumour regression.

Medlife has not independently confirmed the accuracy of these methods. They are for reference only.
<table>
<tr><td>Animal Model:</td><td>4 week old female NCR Nu/Nu female mice (bearing Ovcar-4 tumours)</td></tr>
<tr><td>Dosage:</td><td>59?mg/kg</td></tr>
<tr><td>Administration:</td><td>p.o.; twice daily for 28 days</td></tr>
<tr><td>Result:</td><td>Caused significant tumour regression.</td></tr>
</table>
</td></tr>
<tr><td>包装储存</td><td>
4°C, sealed storage, away from moisture and light

*In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)
</td></tr>
<tr><td></td><td>
体外研究:

DMSO : ≥ 50 mg/mL (113.51 mM)

* "≥" means soluble, but saturation unknown.
<table>
<tr><td rowspan="4">配制储备溶液</td><td>质量
溶剂体积
浓度</td><td>1 mg</td><td>5 mg</td><td>10 mg</td></tr>
<tr><td>1 mM</td><td>2.2702 mL</td><td>11.3510 mL</td><td>22.7020 mL</td></tr>
<tr><td>5 mM</td><td>0.4540 mL</td><td>2.2702 mL</td><td>4.5404 mL</td></tr>
<tr><td>10 mM</td><td>0.2270 mL</td><td>1.1351 mL</td><td>2.2702 mL</td></tr>
</table>
* 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 (sealed storage, away from moisture and light)。-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。

体内研究:

建议根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都建议先按照 体外研究 方式配制澄清的储备液，再依次添加助溶剂：

——为保证实验结果的可靠性，澄清的储备液可以根据储存条件，适当保存；体内实验的工作液，建议您现用现
</td></tr>
</table>

溶解度数据	**配，当天使用**；以下溶剂前显示的百分比是指**该溶剂在您配制终溶液中的体积占比**；如在配制过程中出现沉淀、析出现象，可以通过**加热和/或超声的方式助溶** 1. 建议依照次序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline Solubility: ≥ 2.5 mg/mL (5.68 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.68 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入50 μL Tween-80，混合均匀；然后继续加入 450 μL生理盐水定容至 1 mL。 将 0.9 g 氯化钠，完全溶解于 100 mL ddH?O 中，得到澄清透明的生理盐水溶液 2. 建议依照次序添加每种溶剂： 10% DMSO 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.68 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.68 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。 将 2 g 磺丁基醚 β-环糊精加入 5 mL 生理盐水中，再用生理盐水定容至 10 mL，完全溶解，澄清透明 3. 建议依照次序添加每种溶剂： 10% DMSO 90% corn oil Solubility: ≥ 2.5 mg/mL (5.68 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.68 mM，饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL玉米油中，混合均匀。 *