

Product Data Sheet

Cas No.:	94055-76-2	Cat. No:	PC16717
Product Name:	Suplatast Tosylate		
Product synonym:	甲磺司特;(2-[4-(3-乙氧基-2-羟基丙氧基)苯基氨基甲酰]乙基)二甲基砘对甲苯磺酸盐;N-(9-二甲基氨基-1-氧代壬基)-N-羟基-β-丙氨酸甲酯;Suplatast Tosylate 甲磺司特;甲磺司特Suplatast tosilate;2-[4-(3-乙氧基-2-羟基丙氧基)苯氨基甲酰]乙基二甲基砘对甲苯磺酸盐;氟他米特.氟他胺		
Chemical name:	Suplatast Tosylate		
MF:	C23H33NO7S2	FW:	499.6406
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	[S+](C([H])([H])([H])(C([H])([H])([H])C([H])([H])C([H])([H])C(N([H])C1C([H])=C([H])C=C([H])C=1[H])OC([H])([H])C([H])(C([H])([H])OC([H])([H])C([H])([H])([H])O[H])=O.S(C1C([H])=C([H])C(C([H])([H])([H])=C([H])C=1[H])(=O)(=O)[O-])		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

IL受体抑制剂。Suplatast(IPD 1151T)甲苯磺酸盐是Th2细胞因子抑制剂, 能降低IL-2, IL-5和IL-13的生成, 但对IFN- γ 的生成无效。

生物活性	Suplatast Tosilate (IPD 1151T) is an orally active Th2 cytokine inhibitor which can inhibit both IL-4 and IL-5 production from Th2 cells and suppress IgE synthesis. Suplatast Tosilate is an anti-allergic agent. Suplatast Tosilate has antiasthmatic, anti-inflammatory and antifibrotic activity.			
IC50 & Target[1][2]	<table><tr><td>IL-2</td><td>IL-5</td><td>IL-13</td></tr></table>	IL-2	IL-5	IL-13
IL-2	IL-5	IL-13		

体外研究(In Vitro)	IPD-1151T (1-10 μM; 10 d) induces a concentration-dependent suppression of purified allergen (<i>Cry j</i> 1)-dependent IgE synthesis in autologous B cell cultures mediated by SN-4, without significantly affecting the IgG synthesis. IPD-1151T (1-10 μM; 24 h) clearly depresses phytohemagglutinin (PHA)-induced expression of IL-4 mRNA in normal peripheral blood mononuclear cells (PBMC). Medlife has not independently confirmed the accuracy of these methods. They are for reference only.																	
体内研究(In Vivo)	Suplatast Tosilate (100 mg/kg; once daily for 21 d) inhibits the production of Th2 cytokines, which inhibits eosinophil infiltration into the murine airway, IgE synthesis, and development of BHR, in a murine model of asthma. Suplatast Tosilate (100 μg/kg; once daily for 14 d) strongly suppresses immunoglobulin E contents in serum. Medlife has not independently confirmed the accuracy of these methods. They are for reference only. <table><tr><td>Animal Model:</td><td>Female BALB/c mice (6-8 weeks old) are immunized with ovalbumin</td></tr><tr><td>Dosage:</td><td>100 mg/kg</td></tr><tr><td>Administration:</td><td>P.o. once a day for 21 days</td></tr><tr><td>Result:</td><td>Reduced the number of total cells and eosinophils. Almost completely inhibited the development of antigen-induced bronchial hyperresponsiveness (BHR). Decreased the levels of IL-4, IL-5 and IL-13.</td></tr></table>	Animal Model:	Female BALB/c mice (6-8 weeks old) are immunized with ovalbumin	Dosage:	100 mg/kg	Administration:	P.o. once a day for 21 days	Result:	Reduced the number of total cells and eosinophils. Almost completely inhibited the development of antigen-induced bronchial hyperresponsiveness (BHR). Decreased the levels of IL-4, IL-5 and IL-13.									
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包装储存	4°C, sealed storage, away from moisture *In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)																	
	体外研究: H₂O : ≥ 100 mg/mL (200.14 mM) DMSO : ≥ 33 mg/mL (66.05 mM) * "≥" means soluble, but saturation unknown. <table><tr><td rowspan="4">配制储备溶液</td><td>溶剂体积 浓度</td><td>质量 1 mg</td><td>5 mg</td><td>10 mg</td></tr><tr><td>1 mM</td><td>2.0014 mL</td><td>10.0072 mL</td><td>20.0144 mL</td></tr><tr><td>5 mM</td><td>0.4003 mL</td><td>2.0014 mL</td><td>4.0029 mL</td></tr><tr><td>10 mM</td><td>0.2001 mL</td><td>1.0007 mL</td><td>2.0014 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)。-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	配制储备溶液	溶剂体积 浓度	质量 1 mg	5 mg	10 mg	1 mM	2.0014 mL	10.0072 mL	20.0144 mL	5 mM	0.4003 mL	2.0014 mL	4.0029 mL	10 mM	0.2001 mL	1.0007 mL	2.0014 mL
配制储备溶液	溶剂体积 浓度		质量 1 mg	5 mg	10 mg													
	1 mM		2.0014 mL	10.0072 mL	20.0144 mL													
	5 mM		0.4003 mL	2.0014 mL	4.0029 mL													
	10 mM	0.2001 mL	1.0007 mL	2.0014 mL														

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 (5.00 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.00 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 ddH₂O 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 (5.00 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.00 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 (5.00 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.00 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。

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