Product Data Sheet

Cas No.:	1229-29-4	Cat. No:	PC14686
Product Name:	Doxepin (hydrochloride).		
Product synonym:	盐酸多虑平;盐酸多塞平;N,N-二甲基-3-二苯并[b,e]-噁庚英-11(6H)亚基-丙胺盐酸盐;多虑平盐酸盐;多塞平盐酸盐;Doxepin Hydrochloride 多塞平盐酸盐;Doxepinhydrochloride（顺+反）;多虑平;多虑平 盐酸盐 (异构体混合物);盐酸多虑平(Doxepin Hydrochloride)杂质对照品;盐酸多虑平（盐酸多塞平）;盐酸多塞平 BP 93;盐酸多塞平 EP标准品;盐酸多塞平 USP标准品;盐酸多塞平 标准品;盐酸多塞平(异构体混合物);盐酸多塞平,对照品;11-(3-二甲基氨基亚丙基)-6,11-二氢二苯并[b,e]氧杂卓盐酸盐;N,N-二甲基-3-二苯并[B,E]-庚英-11(6H)亚基-丙胺盐酸盐;盐酸多噻平;11-(3-二甲基氨基亚丙基)-6,11-二氢二苯并[b,e]氧杂卓盐酸盐 (异构体混合物)		
Chemical name:	Doxepin (hydrochloride).		
MF:	C19NOCLH22	FW:	315.8371
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax：	-	Formulation：	-
Solubility :			
SMILES :	Cl[H].O1C2=C([H])C([H])=C([H])C([H])=C2/C(=C(\[H])/C([H])([H])C([H])([H])N(C([H])([H])[H])C([H])([H])[H])/C2=C([H])C([H])=C([H])C([H])=C2C1([H])[H]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

组胺、5-羟色胺、肾上腺素能和毒蕈碱受体拮抗剂，Doxepin盐酸盐能抑制5-羟色胺和去甲肾上腺素的重吸收，有抗抑郁活性。

生物活性	Doxepin hydrochloride is an orally active tricyclic antidepressant agent. Doxepin hydrochloride is a potent and selective **histamine receptor H1** antagonist. Doxepin hydrochloride is also a potent **CYP450** inhibitor and significantly inhibits **CYP450 2C19** and **1A2**. Doxepin inhibits reuptake of serotonin and norepinephrine as a tricyclic **antidepressant**. . Doxepin has therapeutic effects in atopic dermatitis，chronic urticarial，can improve cognitive processes， protect central nervous system. . Doxepin has also been proposed as a protective factor against oxidative stress. .
体外研究(In Vitro)	The protective effect of doxepin is associated with the enhancement of PSD-95 and synapsin 1 expression via PI3K/AKT/mTOR signaling pathway. . **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.** Western Blot Analysis

Cell Line:	SH-SY5Y human neuroblastoma cell line
Concentration:	10 ng/ml
Incubation Time:	2 h
Result:	Improved the protein expre-ssion levels of PSD-95, synapsin 1 and p-AKT in SH-SY5Y cells, and decreased the p

体内研究(In Vivo)	Doxepin (intraperitoneal injection of 1 mg/kg and 5 mg/kg doxepin once a day for 21 days) can protect against the Aβ1-42-induced memory impairment in rats. . **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.**

Animal Model:	SD male rats.
Dosage:	1, 5mg/kg
Administration:	Doxepin (intraperitoneal injection of 1 mg/kg and 5 mg/kg doxepin once a day for 21 days)
Result:	Improved the protein expression levels of PSD-95 and synapsin 1 in hippocampus and tem-poral lobe, and decre

包装储存	Sealed and stored at 4℃， , away from moisture *In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

体外研究:

DMSO : ≥ 100 mg/mL (316.62 mM)

H_2O : ≥ 50 mg/mL (158.31 mM)

* "≥" means soluble, but saturation unknown.

配制储备溶液	溶剂体积 质量 浓度	1 mg	5 mg	10 mg
	1 mM	3.1662 mL	15.8308 mL	31.6616 mL
	5 mM	0.6332 mL	3.1662 mL	6.3323 mL
	10 mM	0.3166 mL	1.5831 mL	3.1662 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 (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**

溶解度数据

1. 建议依照次序添加每种溶剂： PBS

   Solubility: 140 mg/mL (443.26 mM); Clear solution; Need ultrasonic

2. 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 (7.92 mM); Clear solution

   此方案可获得 ≥ 2.5 mg/mL (7.92 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

3. 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 (7.92 mM); Clear solution

   此方案可获得 ≥ 2.5 mg/mL (7.92 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

4. 建议依照次序添加每种溶剂： 10% DMSO 90% corn oil

   Solubility: ≥ 2.5 mg/mL (7.92 mM); Clear solution

   此方案可获得 ≥ 2.5 mg/mL (7.92 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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