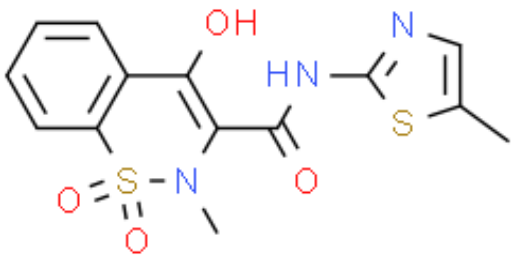
Product Data Sheet

Cas No.:	71125-38-7	Cat. No:	PC14125
Product Name:	Meloxicam (Mobic).		
Product synonym:	美洛昔康;4-羟-2-甲基-N-(5-甲基-2-噻唑)-2H-1,2-苯并噻唑-3-酰胺-1,1-二氧化物;美洛昔康钠;4-羟基-2-甲基-N-(5-甲基-2-噻唑基)-2H-L,2-苯并噻嗪-3-羧酰胺1,1-二氧化物;美罗昔康;4-羟基-2-甲基-N-(5-甲基-2-噻唑)-2H-1,2-苯并噻嗪-3-甲酰胺 1,1-二氧化物;4-羟基-2-甲基-N-(5-甲基-2-噻唑基)-2H-1;Meloxicam 美洛昔康;WAKO135-15131美洛昔康标准品;美洛昔康 EP标准品;美洛昔康 USP标准品;美洛昔康 标准品;美洛昔康（meloxicam）杂质对照品;美洛昔康,BP2002;美洛昔康,企标;美洛昔康原药;美索巴莫;4-羟基-2-甲基-N-(5-甲基-1,3-噻唑-2-基)-2H-1,2-苯并噻嗪-3-羧酸乙酯1,1-二氧化物;4-羟基-2-甲基-N-(5-甲基-2-噻唑基)-2H-1,2-苯并噻嗪-3-甲酰胺-1,1-二氧化物;4-羟基-2-甲基-N-(5-甲基-2-噻唑基)-2H-1,2-苯并噻嗪-3-甲酰胺 1,1-二氧化物		
Chemical name:	Meloxicam (Mobic).		
MF:	C14H13N3O4S2	FW:	351.4007
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	S1(C2=C([H])C([H])=C([H])C([H])=C2C(=C(C(N([H])C2=NC([H])=C(C([H])([H])[H])S2)=O)N1C([H])([H])[H])O[H])(=O)=O		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

非甾体抗炎药，Meloxicam 是一种非甾体类抗炎剂，能够有效抑制 COX 的活性，对 COX-2 和 COX-1 的 IC50 值分别为 0.49 μM 和 36.6 μM。

生物活性	Meloxicam is a non-steroidal antiinflammatory agent, inhibits **COX** activity, with **IC_{50}**s of 0.49 μM and 36.6 μM for COX-2 and COX-1, respectively.
IC50 & Target[1][2]	COX-2: 0.49 μM (IC_{50}) ; COX-1: 36.6 μM (IC_{50}) ; MMP-2

体外研究(In Vitro)	Meloxicam (Compound 5) is a non-steroidal antiinflammatory agent, inhibits COX activity, with IC_{50}s of 0.49 μM and 36.6 μM for COX-2 and COX-1, respectively. Meloxicam inhibits COX tumor cells, but shows no cytotoxicity on CF41.Mg or MDCK cells at 0.25-25 μg/mL. Furthermore, Meloxicam in combination with doxorubicin, has no synergistic effect on CF41.Mg cells. Meloxicam (0.25 μg/mL) decreases CF41.Mg cell migration and invasion, induces decrease in MMP-2 expression, and increases β-catenin phophorylation in CF41.Mg cells, but does not affect the CF41.Mg cell apoptosis. **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.**
体内研究(In Vivo)	Meloxicam (10 mg/kg) alone or in combination with rutin significantly decreases paw liking time on 1st day by 55% and 49% compared with the formalin-treated group, respectively, however the combination reduces time non-significantly on 3rd day in mice. Meloxicam alone or in combination with rutin also decreases relative liver weights, reduces MDA contents, induces liver SOD activities, hampers IL-1β content, and significantly reduces the number of positive caspase-3 immunoreactive cells in mice. **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.**
包装储存	Powder **-20°C** 3 years **4°C** 2 years In solvent **-80°C** 6 months **-20°C** 1 month

溶解度数据

体外研究:

DMSO : 50 mg/mL (142.29 mM; Need ultrasonic)

H_2O : 0.67 mg/mL (1.91 mM; Need ultrasonic)

配制储备溶液	溶剂体积 质量 浓度	1 mg	5 mg	10 mg
	1 mM	2.8458 mL	14.2288 mL	28.4576 mL
	5 mM	0.5692 mL	2.8458 mL	5.6915 mL
	10 mM	0.2846 mL	1.4229 mL	2.8458 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。

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**

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

   Solubility: ≥ 2.5 mg/mL (7.11 mM); Clear solution

   此方案可获得 ≥ 2.5 mg/mL (7.11 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。

2. 建议依照次序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline

   Solubility: ≥ 1 mg/mL (2.85 mM); Clear solution

   此方案可获得 ≥ 1 mg/mL (2.85 mM，饱和度未知) 的澄清溶液。

   以 1 mL 工作液为例，取 100 μL 10.0 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

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