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产品名称: **Mafodotin**

产品别名: **McMMAF; Maleimidocaproyl monomethylauristatin F**

<b>生物活性:</b>				
<b>Description</b>	McMMAF is a protective group-conjugated MMAF. MMAF is a potent tubulin polymerization inhibitor.			
<b>IC<sub>50</sub> &amp; Target</b>	Auristatin			
<b>In Vitro</b>	MMAF is a new auristatin derivative with a charged C-terminal phenylalanine that attenuates its cytotoxic activity compared to its uncharged counterpart, Monomethyl auristatin E (MMAE). Because of MMAF is highly toxic, it cannot be used as a drug itself. MMAF induces potent antitumor effects when conjugated via protease cleavable linkers to a monoclonal antibody targeting internalizing, tumor-specific cell surface antigens. The linker to the monoclonal antibody is stable in extracellular fluid, but is cleaved by cathepsin once the conjugate has entered a tumor cell, thus activating the anti-mitotic mechanism.			
<b>Solvent&amp;Solubility</b>	<b>In Vitro:</b> <b>DMSO : ≥ 100 mg/mL (108.09 mM)</b>  * "≥" means soluble, but saturation unknown.			
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>Concentration</b>
		<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		1 mM	1.0809 mL	5.4045 mL
		5 mM	0.2162 mL	1.0809 mL
		10 mM	0.1081 mL	0.5404 mL
	*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液; 一旦配成溶液, 请分装保存, 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 (stored under nitrogen)。-80°C 储存时, 请在 6 个月内使用, -20°C 储存时, 请在 1 个月内使用。  <b>In Vivo:</b>  请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 In Vitro 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.请依序添加每种溶剂: 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline  Solubility: ≥ 5 mg/mL (5.40 mM); Clear solution  此方案可获得 ≥ 5 mg/mL (5.40 mM, 饱和度未知) 的澄清溶液。  以 1 mL 工作液为例, 取 100 μL 50.0 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。  2.请依序添加每种溶剂: 10% DMSO →90% corn oil  Solubility: ≥ 5 mg/mL (5.40 mM); Clear solution  此方案可获得 ≥ 5 mg/mL (5.40 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 50.0 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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#### References

- [1]. Polson AG, et al. Antibody-drug conjugates for the treatment of non-Hodgkin's lymphoma: target and linker-drug selection. Cancer Res. 2009 Mar 15;69(6):2358-2364.
- [2]. Jianmin Fang, et al. Anti-her2 antibody and conjugate thereof. US 20160304621 A1.



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