

## **Product Data Sheet**

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Cas No.:	79066-03-8	Cat. No:	PL06803
Product Name:	DMHCA		
Product synonym:	(3β)-3-Hydroxy-N,N-dimethylchol-5-en-24-amide		
Chemical name:	DMHCA		
MF:	C34H32FEN4O4	FW:	616.487289428711
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:	O H O N Fe <sup>2</sup> N		
λmax:	-	Formulation:	-
Solubility :			
SMILES:	[Fe+2].OC(CCC1C(C)=C2C=C3C(C)=C(C=C)C(C=C4C(C)=C(C=C)C(=CC5C(C)=C(CCC(=O)O)C(=CC=1[N-]2)N=5)[N-]4)=N3)=O  t:8,16,23,3		
InChl Code:	-		
InChl Key:			
WARNING This product is not for human or veterinary use.			

## **Product Description**

DMHCA 是一种有效的选择性 LXR 激动剂,特别激活 LXR 通路的胆固醇流出臂,而不刺激甘油三酯的合成。DMHCA 具有抗炎作用,可用于糖尿病胆固醇稳态的研究。

生物活性	DMHCA, a potent and selective LXR agonist, specifically activates the cholesterol efflux arm of the LXR pathway without stimulating triglyceride synthesis. DMHCA has anti-inflammatory effects and can be used for the research of cholesterol homeostasis diabetes.
IC50 & Target[1][2]	IC50: LXR

体外研究(In Vitro)	In ex vivo treatment of diabetic CD34 cells, DMHCA (10 μM; 16-18 hours) restores the fluidity of the membranes to baseline nondiabetic levels.  DMHCA restores the levels of BM-derived TNF-α and IL-3 to baseline and significantly reduces CCL-2 production by >50% in the BM supernatants and the systemic circulation compares to the control mice. DMHCA also increases the number of CACs in the BM and peripheral circulation and upregulates the egression of vascular reparative cells into the peripheral circulation.  In the PAGA analysis, DMHCA treatment enhances the overall production and robustness of erythrocyte progenitors. DMHCA enhances flux down the erythrocyte progenitor lineage. It also DMHCA increase in erythrocyte progenitor density in BM cells.  DMHCA not only expands the proportion of erythrocyte progenitors but also increases the expression of the hemogl	
体内研究(In Vivo)	DMHCA (oral administration; 6 months; chow 8mg/kg body weight /day) restores cholesterol homeostasis in diabetic retina. It significantly increases endogenous LXR ligands, desmosterol, and total oxysterols in the diabetic retina. 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	
溶解度数据	In Vitro: DMSO: 7.69 mg/mL (19.15 mM; Need ultrasonic)配制储备液	