# MCE MedChemExpress

### **Product** Data Sheet

## Chloramphenicol palmitate

**Cat. No.:** HY-B1599 **CAS No.:** 530-43-8

Molecular Formula:  $C_{27}H_{42}Cl_2N_2O_6$ 

Molecular Weight: 561.54

Target: Bacterial; Antibiotic

Pathway: Anti-infection

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

-20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (178.08 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.7808 mL	8.9041 mL	17.8082 mL
	5 mM	0.3562 mL	1.7808 mL	3.5616 mL
	10 mM	0.1781 mL	0.8904 mL	1.7808 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.45 mM); Clear solution

#### **BIOLOGICAL ACTIVITY**

Description

Chloramphenicol palmitate is an orally active broad spectrum antibiotic and has a broad spectrum of activity against gram positive and gram negative bacteria. Chloramphenicol palmitate inhibits bacterial protein synthesis by blocking the peptidyl transferase step. Chloramphenicol palmitate can be used as bacterial selection agent in transformed cells containing chloramphenicol resistance genes<sup>[1]</sup>.

#### **REFERENCES**

[1]. Siti Nani Nurbaeti, et al. Sustained-release Microparticle Dry Powders of Chloramphenicol Palmitate or Thiamphenicol Palmitate Prodrugs for Lung Delivery as Aerosols. Eur J Pharm Sci. 2019 Oct 1;138:105028.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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