

# **Product** Data Sheet

# **Florfenicol**

 Cat. No.:
 HY-B1374

 CAS No.:
 73231-34-2

 Molecular Formula:
 C<sub>12</sub>H<sub>14</sub>Cl<sub>2</sub>FNO<sub>4</sub>S

Molecular Weight: 358.21

Target: Bacterial; Antibiotic

Pathway: Anti-infection

Storage: Powder -20°C

-20°C 3 years 4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (279.17 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7917 mL	13.9583 mL	27.9166 mL
	5 mM	0.5583 mL	2.7917 mL	5.5833 mL
	10 mM	0.2792 mL	1.3958 mL	2.7917 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.98 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.98 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.98 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

Florfenicol, a commonly used veterinary antibiotic, is currently indicated for the treatment of bovine respiratory disease, and also used in aquaculture for the control of enteric septicemia in catfish. Florfenicol can induce early embryonic death in eggs, with an LC50 of 1.07  $\mu$ g/g.

# **CUSTOMER VALIDATION**

- Chemosphere. 2019 Jun;225:378-387.
- Microorganisms. 2022, 10(9), 1735.
- Vet Microbiol. 2024 May, 292, 110046.

See more customer validations on  $\underline{www.\mathsf{MedChemExpress.com}}$ 

#### **REFERENCES**

[1]. Al-Shahrani S, et al. Florfenicol induces early embryonic death in eggs collected from treated hens. BMC Vet Res. 2015 Aug 18;11(1):213.

[2]. Corinna Kehrenberg, et al. A new mechanism for chloramphenicol, florfenicol and clindamycin resistance: methylation of 23S ribosomal RNA at A2503. Molecular MicrobiologyVolume 57, Issue 4, pages 1064–1073, August 2005

Caution: Product has not been fully validated for medical applications. For research use only.

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