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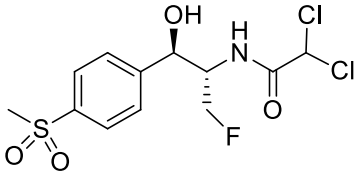
PRODUCT DATA SHEET

Florfenicol

Code No.: **BIA-F1487**

Pack sizes: **5 mg, 25 mg**



Synonyms : (-)Florfenicol, Sch 25298

Specifications

CAS #	:	**73231-34-2**
Molecular Formula	:	**$C_{12}H_{14}Cl_2FNO_4S$**
Molecular Weight	:	**358.2**
Source	:	**Synthetic**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol, DMSO. Poor water solubility.**

Application Notes

Florfenicol is synthesised from thiamphenicol by replacing the 3-hydroxy group with fluorine, first synthesised at Schering in 1980. By replacing the hydroxy group, it was rationalised that chloramphenicol resistance via chloramphenicol acetyltransferase could be eliminated. Florfenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria. Florfenicol acts by binding to the 23S sub-unit of the 50S ribosome, inhibiting protein synthesis. Florfenicol has been extensively studied with over 400 literature citations.

References

1. An efficient synthesis of florfenicol. Schumacher D.P. et al., J. Org. Chem. 1990, 55, 5291.
2. An improved industrial synthesis of florfenicol plus an enantioselective total synthesis of thiamphenicol and florfenicol Wu G. et al., J. Org. Chem. 1997, 62, 2996.
3. In vitro activity of chloramphenicol and thiamphenicol analogs. Neu H.C. & Fu K.P. Antimicrob. Agents Chemother. 1980, 18, 311.

For in vitro laboratory use only. Not for human or animal use.

Updated: 14 November 2025

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