Florfenicol amine (hydrochloride)

Item No. 18631

CAS Registry No.: 108656-33-3
Formal Name: αR-[(1S)-1-amino-2-fluoroethyl]-4-(methylsulfonyl)-benzenemethanol, monohydrochloride
MF: C_{10}H_{14}FNO_{3}S • HCl
FW: 283.7
Purity: ≥ 95%
UV/Vis.: λ_{max}: 222, 265, 272 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

Florfenicol amine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the florfenicol amine (hydrochloride) in the solvent of choice. Florfenicol amine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of florfenicol amine (hydrochloride) in ethanol is approximately 30 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of florfenicol amine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of florfenicol amine (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Florfenicol amine is a major metabolite of the antibiotic florfenicol, a fluorinated derivative of chloramphenicol, which is commonly used in veterinary medicine.\(^1,2\) The pharmacokinetics of florfenicol and florfenicol amine are commonly studied in edible tissues from domestic animals.\(^3-5\)

References