

PRODUCT INFORMATION



Micronomicin (sulfate)

Item No. 27951

CAS Registry No.: 66803-19-8
Formal Name: O-2-amino-2,3,4,6-tetradeoxy-6-(methylamino)- α -D-erythro-hexopyranosyl-(1 \rightarrow 4)-O-[3-deoxy-4-C-methyl-3-(methylamino)- β -L-arabinopyranosyl-(1 \rightarrow 6)]-2-deoxy-D-streptamine, sulfate

Synonyms: Antibiotic XK-62-2, Gentamicin C_{2b}, Sagamicin

MF: C₂₀H₄₁N₅O₇ • XH₂SO₄

FW: 463.6

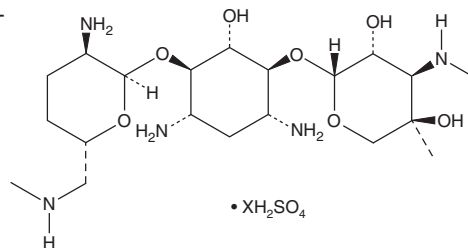
Purity: \geq 95%

Supplied as: A solid

Storage: -20°C

Stability: \geq 4 years

Item Origin: Bacterium/*Micromonospora sagamiensis*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Micronomicin (sulfate) is supplied as a solid. A stock solution may be made by dissolving the micronomicin (sulfate) in the solvent of choice, which should be purged with an inert gas. Micronomicin (sulfate) is slightly soluble in ethanol.

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 micronomicin (sulfate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of micronomicin (sulfate) in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Micronomicin is an aminoglycoside antibiotic originally isolated from *Micromonospora*.^{1,2} It is active against *S. aureus*, *B. subtilis*, *B. cereus*, *E. coli*, and *K. pneumoniae* (MICs = 0.001-8.3 μ g/ml) and inactive against *C. albicans* and *A. niger* (MICs = >10 μ g/ml).¹

References

1. Okachi, R., Kawamoto, I., Takasawa, S., et al. A new antibiotic XK-62-2 (Sagamicin). I. Isolation, physicochemical and antibacterial properties. *J. Antibiot. (Tokyo)* **27(10)**, 793-800 (1974).
2. Eagan, R.S., DeVault, R.L., Mueller, S.L., et al. A new antibiotic XK-62-2. III The structure of XK-62-2, a new gentamicin C complex antibiotic. *J. Antibiot. (Tokyo)* **28(1)**, 29-34 (1975).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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