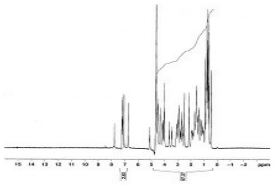
Gentamicin C1a sulfate, EvoPure®
PRODUCT DATA SHEET

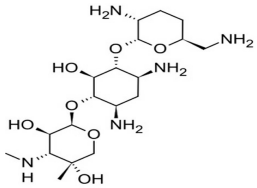
issue date 01/06/2020

Product Name:	Gentamicin C1a sulfate, EvoPure®
Product Number:	G032
CAS Number:	37713-04-5; 26098-04-4 (free base)
Molecular Formula:	$C_{19}H_{39}N_5O_7 \cdot xH_2SO_4$ (lot specific)
Molecular Weight:	449.54 g/mol (Free base)
Form:	Powder
Appearance:	White powder
Source:	*Micromonospora*
pH:	3.5-5.5
Storage Conditions:	-20°C
Description:	Gentamicin C1a sulfate, EvoPure® is ≥95.0% Gentamicin C1a. Gentamicin C1a is part of the Gentamicin C complex, along with Gentamicin C1 and Gentamicin C2, and together this complex makes up 80% of Gentamicin and has the highest antibacterial activity. Gentamicin C1a differs from Gentamicin C1 by a methyl group in the 6' position of the purpurosamine (2-amino-hexose) ring. The antimicrobial activity of the Gentamicin complex is thought to arise from the lack of hydroxy groups on the 3' and 4' positions of the purpurosamine (2-amino-hexose) fragments. For more Gentamicin products, click here.
Mechanism of Action:	Aminoglycosides target the 30S ribosomal subunit resulting in an inability to read mRNA ultimately producing a faulty or nonexistent protein.
Spectrum:	Gentamicin is a broad spectrum antibiotic targeting a wide variety of gram positive and gram negative bacteria. It is effective against several strains of *Mycoplasma.*
Microbiology Applications	Gentamicin EvoPure® compounds can be used to study effects of individual Gentamicin components on various bacterial strains. Representative MIC values include: • *Bacillis subtilis* ATCC 6633: 0.02 µg/mL • *Escherichia coli* ATCC 10536: 1.1µg/mL • *Staphylococcus aureus* ATCC 6538P 0.06 µg/mL

Technical Data:

HNMR Spectra





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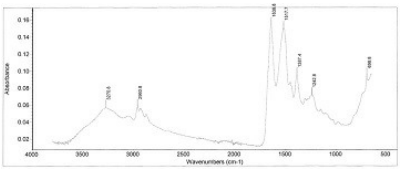
Solvent: D2O

Instrument: Varian 300

Frequency: 300 MHz

FTIR Spectra



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References:

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