

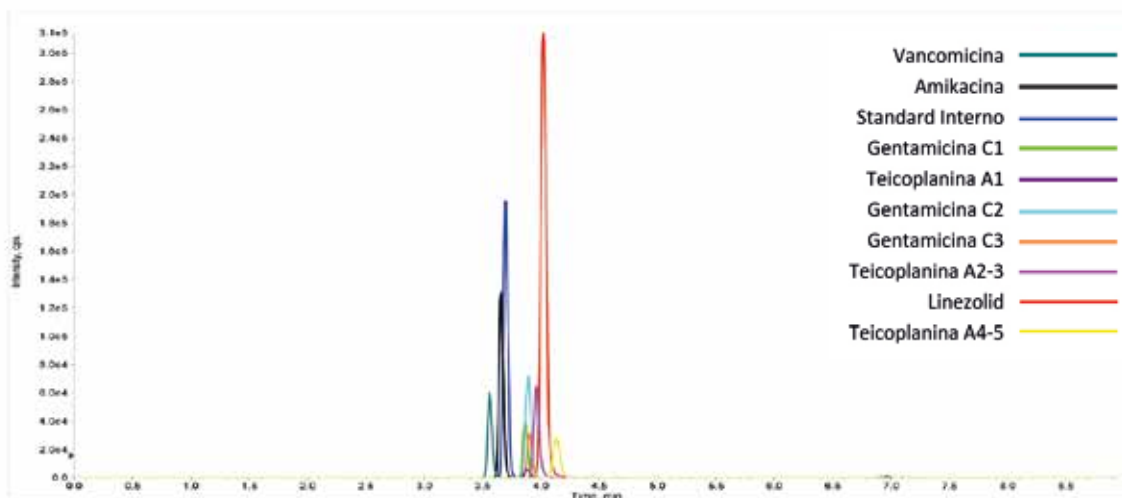
SHORT METHOD DESCRIPTION

FloMass® Antibiotics in Serum

Amikacin, Gentamicin, Vancomycin, Teicoplanin and Linezolid are antibiotics with a narrow therapeutic range, so the difference between first effective concentration and first toxic level is very close. Above the first toxic concentration, side effects can occur, even leading to serious consequences. Below first effective concentration, a selection of antibiotic-resistant bacteria is promoted, and there is the risk of ineffective antibiotic treatment.

Moreover, the metabolism of these drugs can be very different among people, therefore adjustment of drug dosage is necessary in order to obtain the optimal therapeutic effect.

For these reasons, it is highly suggested to monitor circulating therapeutic drug to avoid adverse events and keep the therapeutic effect.



HPLC-MS/MS system conditions

Ionization: ESI positive mode

MS/MS: specific MRM

Injection volume: 2-10 μl (variable according to instrumental sensitivity)

Running time: 10 min

Column heater: 50°C

Performance

Analyte	Linearity ($\mu\text{g/mL}$)	LLOD (ng/mL)	LLOQ (ng/mL)	CV% Intra	CV% Inter
Amikacin	0.023 - 131	6.9	23.0	5.60 - 7.10	7.40 - 8.10
Vancomycin	0.084 - 126	25.1	83.7	4.30 - 5.50	8.80 - 11.00
Teicoplanin	0.082 - 263	24.5	81.7	3.80 - 4.50	6.70 - 11.40
Gentamicin	0.003 - 36.5	0.94	3.13	3.80 - 5.90	6.10 - 8.90
Linezolid	0.010 - 123	2.1	10.3	1.90 - 6.50	6.80 - 9.00

ORDERING GUIDE

Order No.	Description	Quantity
EUM15150	FloMass® Antibiotics in Serum (Gentamicin, Amikacin, Teicoplanin, Vancomycin, Linezolid) LC-MS/MS detection	150 assays
	Contents	
	Mobile Phase A	1 x EUM15011
	Mobile Phase B	1 x EUM15012
	Precipitant Solution	1 x EUM15021
	Internal Standard Mix	1 x EUM15031
	Separately available components	
EUM15011	Mobile Phase A	1000 ml
EUM15012	Mobile Phase B	1000 ml
EUM15021	Precipitant Solution	35 ml
EUM15031	Internal Standard Mix	1.5 ml
	Accessory	
EUM15023	Washing Solution	1000 ml
EUM00C15	Analytical Column with test chromatogram	1 pc
EUM00A11	Precolumns	4 pcs
EUM00A10	Holder (incl. 1 precolumn)	1 pc
EUM15071	FloTuning Antibiotics	1x2 ml
EUM15051	Control Set for Antibiotics in Serum, lyoph. (2 levels)	2x2x1 ml
EUM15041	Calibrator Set for Antibiotics in Serum, lyoph. (6 levels)	2x6x1 ml