



# Antibiotic reference materials

Antibiotics are used to treat bacterial infections. Most classes of antibiotics, such as the penicillins, macrolides, sulfonamides and quinolones have a wide therapeutic index and therefore do not require therapeutic drug monitoring.

However, there is a strong case for monitoring aminoglycosides (gentamicin, tobramycin, amikacin and netilmicin) and glycopeptides

(vancomycin and teicoplanin). For these classes there exists a delicate balance between concentrations required for efficacy and those where significant and potentially irreversible toxicity may occur. Inadequate concentrations can lead to treatment failure and the development of antibiotic resistance.

LGC offers certified reference materials for a wide range of antimicrobial agents. Those presented here are the ones most frequently therapeutically monitored. If you require a drug not listed here, please contact your local sales office.



## Reference materials

Product code	Description	Unit 1	Unit 2
<b>Aminoglycoside antibiotics</b>			
TRC-A578500	Amikacin Sulfate	100 mg	1 g
TRC-A578502	Amikacin-d5 Sulfate	10 mg	25 mg
USP-1289003	Gentamicin Sulfate	200 mg	
CERG-011	Gentamicin Sulfate, 1.0 mg/ml (as free base)	1 ml	
TRC-N389975	Neomycin Trisulfate Hydrate	100 g	
USP-1460500	Netilmicin Sulfate	500 mg	
TRC-S687500	Streptomycin Sulfate	1 g	10 g
TRC-T524000	Tobramycin	500 mg	5 g

<b>Glycopeptides</b>			
TRC-T015500	Teicoplanin	50 mg	500 mg
LGCFOR0239.00	Vancomycin Hydrochloride	10 mg	

<b>Antituberculosis drugs</b>			
TRC-A179520	Acetyl Isoniazid	250 mg	2.5 g
TRC-A179522	Acetyl Isoniazid-d4	1 mg	10 mg
TRC-E889800	Ethambutol Dihydrochloride	10 g	100 g
TRC-E889802	Ethambutol-d4 Dihydrochloride	1 mg	10 mg
TRC-I821450	Isoniazid	1 g	10 g
TRC-I821452	Isoniazid-d4	1 mg	10 mg
TRC-P840600	Pyrazinamide	1 g	10 g
TRC-P840602	Pyrazinamide-15N,d3	1 mg	10 mg
TRC-R508000	Rifampicin	2.5 g	25 g
TRC-R508002	Rifampicin-d3	1 mg	10 mg
TRC-D231250	N-Demethyl Rifampin	2.5 mg	25 mg
TRC-D288726	25-Desacetyl Rifampicin	1 mg	10 mg
TRC-D288727	25-Desacetyl Rifampicin-d3	0.5 mg	5 mg

<b>Others</b>			
LGCFOR0516.00	Chloramphenicol	10 mg	
TRC-C325032	Chloramphenicol-13C6	10 mg	
SC-300498	DL-threo-Chloramphenicol-d5	1 mg	
NMI-D714	Chloramphenicol glucuronide	1 mg	

## Proficiency testing scheme

Analyte	Matrix	Distribution frequency	Samples
<b>Proficiency testing scheme</b> <i>Produced in collaboration with the UKNEQAS for Antibiotic Assays</i>			
Amikacin	Serum	Monthly	1 x 1 ml
Chloramphenicol	Serum	Monthly	1 x 1 ml
Netilmicin	Serum	Monthly	1 x 1 ml
Teicoplanin	Serum	Monthly	1 x 1 ml
Flucytosine (Antifungal agent)	Serum	Monthly	1 x 1 ml
Tobramycin	Serum	Monthly	1 x 1 ml
Gentamicin & Vancomycin (combined sample)	Serum	Monthly	4 x 2 ml



Contact us for information on our solvents and additives for clinical and forensics applications:

### **Brazil**

Tel: +55 12 3302 5880

Email: [bz@lgcstandards.com](mailto:bz@lgcstandards.com)

### **Bulgaria**

Tel: +359 (0)2 971 4955

Email: [bg@lgcstandards.com](mailto:bg@lgcstandards.com)

### **China**

Tel: 800 810 4630 (toll-free)

Email: [infochina@lgcgroup.com](mailto:infochina@lgcgroup.com)

### **Czech Republic**

Tel: +48 22 751 31 40

Email: [pl@lgcstandards.com](mailto:pl@lgcstandards.com)

### **France**

Tel: +33 (0)3 88 04 82 82

Email: [fr@lgcstandards.com](mailto:fr@lgcstandards.com)

### **Germany**

Tel: +49 (0)281 9887 0

Email: [de@lgcstandards.com](mailto:de@lgcstandards.com)

### **Hungary**

Tel: +49 (0)281 9887 0

Email: [de@lgcstandards.com](mailto:de@lgcstandards.com)

### **India**

Tel: +91 (0)80 6701 2000

Email: [in@lgcpromochem.com](mailto:in@lgcpromochem.com)

### **Ireland**

Tel: +44 7879556983

Email: [ire@lgcstandards.com](mailto:ire@lgcstandards.com)

### **Italy**

Tel: +39 02 2412 6830

Email: [it@lgcstandards.com](mailto:it@lgcstandards.com)

### **Middle East**

Tel: +49 (0)281 9887 0

Email: [de@lgcstandards.com](mailto:de@lgcstandards.com)

### **Netherlands**

Tel: +31 (0)643 775 422

Email: [nl@lgcstandards.com](mailto:nl@lgcstandards.com)

### **Nordic countries**

Tel: +49 (0)281 9887 0

Email: [de@lgcstandards.com](mailto:de@lgcstandards.com)

### **Poland**

Tel: +48 22 751 31 40

Email: [pl@lgcstandards.com](mailto:pl@lgcstandards.com)

### **Romania**

Tel: +40 364 116890

Email: [ro@lgcstandards.com](mailto:ro@lgcstandards.com)

### **Russia**

Tel: +7 812 777 04 88

Email: [ru@lgcgroup.com](mailto:ru@lgcgroup.com)

### **South Africa**

Tel: +27 (0)11 466 4321

Email: [info@industrialanalytical.co.za](mailto:info@industrialanalytical.co.za)

### **Spain**

Tel: +34 (0)93 308 4181

Email: [es@lgcstandards.com](mailto:es@lgcstandards.com)

### **Turkey**

Tel: +90 216 360 0870

Email: [tur@lgcstandards.com](mailto:tur@lgcstandards.com)

### **United Kingdom**

Tel: +44 (0)20 8943 8480

Email: [uksales@lgcstandards.com](mailto:uksales@lgcstandards.com)

### **USA + Canada**

Tel: 1-855-LGC-USA1 (toll-free)

Email: [lgcusa@lgcstandards.com](mailto:lgcusa@lgcstandards.com)

[www.lgcstandards.com](http://www.lgcstandards.com) • [askus@lgcstandards.com](mailto:askus@lgcstandards.com)

 [@LGCstds\\_For](https://twitter.com/LGCstds_For)

## Science for a safer world

Brazil • Bulgaria • China • Czech Republic • France • Germany • Hungary • India • Ireland • Italy • Netherlands  
Nordic countries • Poland • Romania • Russia • South Africa • Spain • Turkey • United Kingdom • USA

