

The Xpert™ vanA/vanB advantage: **Simplicity**

- Fully automated process reduces handling time to just minutes
- Random access for flexibility and workflow optimization
- Rapid results to improve patient management
- Fully integrated reagent and instrument system for accuracy and reproducibility

1. Insert swab into Sample reagent vial and break at score
2. Vortex and dispense Sample into port S
3. Dispense Reagent 1 into port 1
4. Dispense Reagent 2 into port 2
5. Insert cartridge and start assay

Total hands-on time = 2 minutes

Ordering Information

Xpert™ vanA/vanB Catalog No. GXVANA/B-CE-10
(10 Cartridges with reagents)

References:

1. Montecalvo et al (2001) *Infect Control Hosp Epidemiol* 22:437-442.
2. *European Antimicrobial Resistance Surveillance System*, <http://www.rivm.nl/earss>. 17 July 2008.
3. Siegel et al (2007) *Am J Infect Control* 35 (10 Suppl 2):S165-93.
4. Muto et al (2003) *Inf Control Hosp Epidemiol* 24:362-386.
5. WHO 2004. Practical Guidelines for Infection Control in Healthcare facilities. SEARO Regional Publication No. 41.

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Xpert™ vanA/vanB

Screening for VRE in less than one hour.



Xpert™ vanA/vanB:

Effective prevention of healthcare-associated VRE infections begins with active surveillance programs that facilitate timely interventions to decrease the spread of VRE. Cepheid's Xpert vanA/vanB delivers on-demand results in less than an hour, reducing the window for potential transmissions from days to minutes. Rapid intervention can prevent VRE transmissions — improving patient care and reducing costs¹ for healthcare facilities.

**Xpert:
in action**

VRE: A growing concern

The European Antimicrobial Resistance Surveillance System indicates that infection rates with vancomycin-resistant enterococci (VRE) are increasing, particularly in countries with high MRSA prevalence.²

- The proportion of invasive vancomycin resistant *E. faecium* isolates reached 37% in Greece, 33% in Ireland, 29% in Portugal, 21% in the UK and 15% in Germany²
- The percentage of invasive vancomycin resistant *E. faecalis* was found to be more than 6% in Greece and more than 2% in Portugal, Ireland and the UK²

Recommendations:

CDC, SHEA and WHO have put forward the following guidelines on how to reduce VRE infections:^{3, 4, 5}

- Comprehensive surveillance for targeted Multi-Drug Resistant Organisms; especially for those at high risk⁵
- Judicious use of antibiotics
- Application of infection control precautions during patient care
- Education and training of healthcare personnel
- Environmental cleanliness
- Decolonization therapy when appropriate

Important healthcare benefits of rapid screening:

- Allows for an immediate identification of VRE carriers from non-carriers
- Rapid implementation of barrier precautions
- Early identification improves patient bed management



Sensitive and Specific:

Appropriate patient management decisions can be made quickly.

Performance characteristics of the Xpert vanA/vanB Assay compared to vanA and vanB Direct culture method

Xpert vanA/vanB vs. Direct Culture vanA/vanB

	Sensitivity	Specificity	PPV	NPV
Perianal	92.5% (52/56)	88.7% (331/373)	55.3% (52/94)	98.8% (331/335)
Rectal	98.9% (86/87)	80.5% (528/656)	40.2% (86/214)	99.8% (528/529)
Total	96.5% (138/143)	83.5% (859/1029)	44.8% (138/308)	99.4% (859/864)

Performance characteristics of the Xpert vanA/vanB Assay compared to vanA and vanB Enriched culture method

Xpert vanA/vanB vs. enriched culture vanA/vanB

	Sensitivity	Specificity	PPV	NPV
Perianal	98.1% (51/52)	93.4% (352/377)	67.1% (51/76)	97.7% (352/353)
Rectal	97.6% (81/83)	90.2% (595/660)	55.5% (81/146)	99.7% (595/597)
Total	97.8% (132/135)	91.3% (947/1037)	59.5% (132/222)	99.7% (947/950)

Performance characteristics of Xpert™ vanA/vanB were determined in a multi-site prospective investigation study at seven institutions.

Flexible:

Modular platform scales to your testing needs – upgrades are easy.

Tests completed

# of GX Sites	8 hours	16 hours	24 hours
4	26	52	78
8	52	104	156
12	78	156	234
16	104	208	312