



VITEK[®] 2

Microbiology with confidence



PIONEERING DIAGNOSTICS

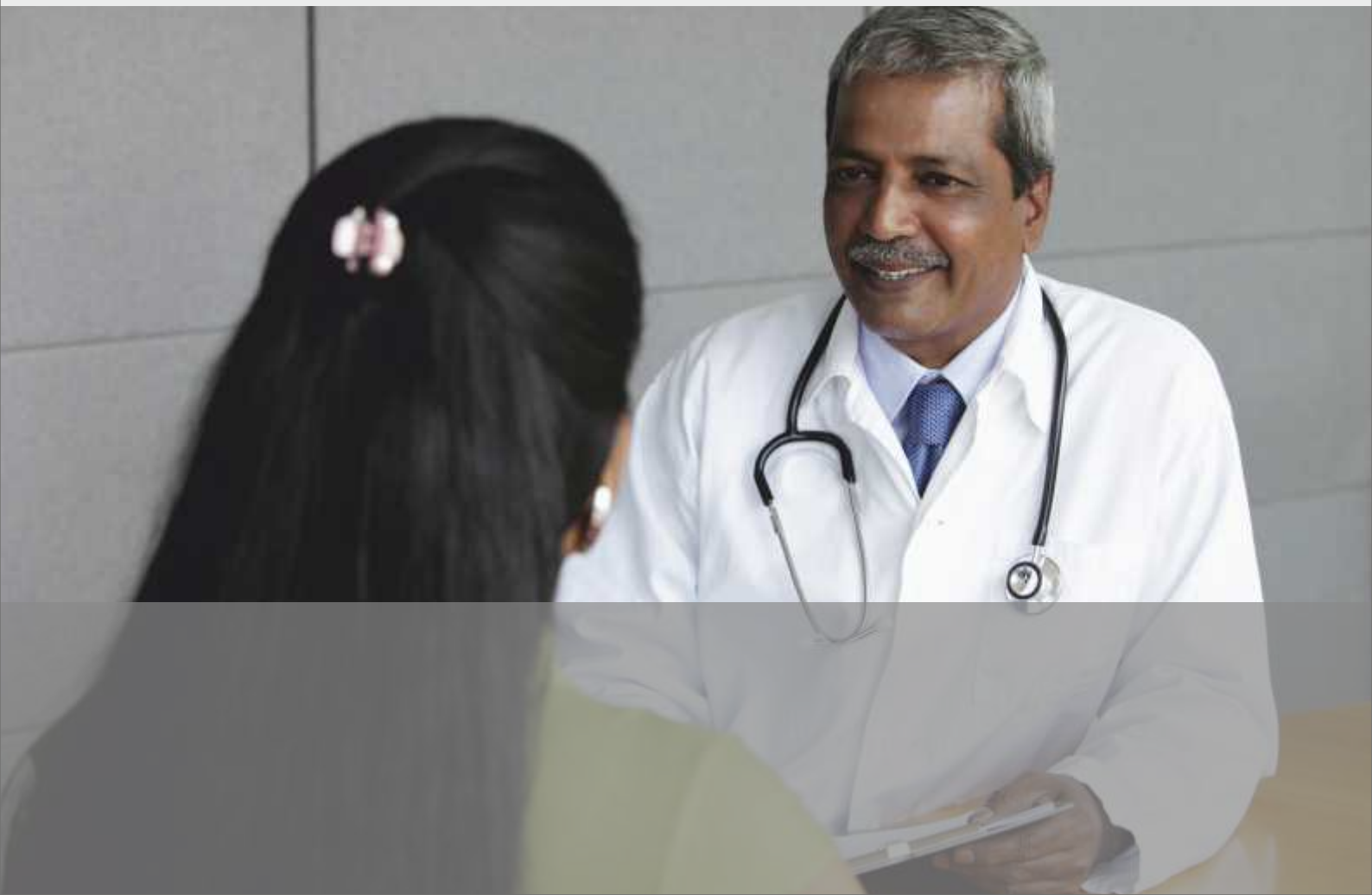
IMPROVED PATIENT OUTCOMES

You are faced with an upsurge in bacterial resistance making its detection more complex. Studies show that providing rapid identification and antibiotic susceptibility (ID/AST) results leads to improved patient and financial outcomes.^{2,9,10}

Faster and more accurate results contribute to improved patient management, reducing the number of diagnostic tests, the length of hospitalisation and all associated costs.^{1,2,9,10,13}



Having a rapid, reliable solution helps to improve patient outcomes, and is the reason why the **VITEK® 2** is the most widely used ID/AST system globally.



VITEK® 2

Susceptibility Testing Made Simple

Automated Validation of Every Result

VITEK® 2 technology represents a smarter way to automate ID/AST testing. It provides rapid, automatic, standardised validation of every test result with next generation expert software, the ADVANCED EXPERT SYSTEM^{2,3,9,10}.

VITEK® 2 is a unique system that uses a phenotypic expert system instead of commonly used rules-based expert systems which are incapable of recognizing unusual results (i.e. mixed cultures) and new resistance phenotypes for which no rules exist. As a result, microbiologists need to review every single result for rules-based systems, even the vast majority that do not trigger any rules.

RESULTS YOU CAN TRUST

The VITEK® 2 ADVANCED EXPERT SYSTEM software is like having an expert advisor standing by your side^{3,15,17}. It applies a colored indicator to each isolate that shows the level of confidence in the susceptibility results:

	Green	: Fully consistent results
	Yellow	: Inconsistent result, review required
	Red	: Unknown phenotype, check results
	Purple	: Phenotype not in database

Microbiologists can quickly and confidently report the majority of results to clinicians, and focus their attention on only those that require their expertise¹³.

PROVEN MEDICAL VALUE

MIC* results from a cultured isolate in as little as 5 to 8 hours^{13,16}, allows clinicians to quickly optimise antimicrobial therapy and implement infection control policies¹⁰:

- Reduced length and cost of hospitalisation^{1,2,9,10}
- Decrease antimicrobial usage and help implement institutional stewardship policies^{2,9,10}
- Right drug at the right time

*MIC - Minimum inhibitory concentrations

1. Ayats J., et. al. ASM 2007; Poster C-158. 2. Barenfanger J., et. al. J Clin Microbiol, 1999; 37(5): 1415. 3. Barry J., et. al. J of Antimicrob Chemother, 2003; 51: 1191. 4. Blondel-Hill E., et. al. ICAAC 2006; Poster D-691. 5. Bobenchik A.M., et. al. J Clin Microbiol, 2014; 53(3): 816. 6. Bobenchik A.M., et. al. J Clin Microbiol, 2014; 52 (2): 392. 7. Doat V., et. al. ECCMID 2007; Poster P-1727. 8. Eigner U., et. al. J Clin Microbiol, 2005; 43(8): 3829. 9. Galar A., et. al. J Infect, 2012; 65(4): 302. 10. Galar A., et. al. Eur J Clin Microbiol Infect Dis, 2012; 31 (9): 2445. 11. Heller-Ono A. bioMerieux White Paper, 2008. 12. Hooper M., et. al. ECCMID 2013; Poster P-1536. 13. LaBombardi V.J. bioMerieux White Paper, 2011. 14. Larone D.H., et. al. ASM 2000; Poster C-279. 15. Livermore DM., et. al. J Antimicrob Chemother, 2002; 49 (2): 289. 16. Römmler W., et. al. ASM 2006; Poster C-123. 17. Sanders CC., et. al. J Clin Microbiol, 2001; 39 (7): 2379.

bioMérieux Customer: Microbiology Chart Report Printed Jun 30, 2017 17:00 IST

Patient Name: XYZ Patient ID: BH030866
Location: ICU Physician: DR AAAA BBBB
Lab ID: 60451-U Isolate Number: 1
Organism Quantity: Collected: Jun 29, 2017
Selected Organism: Escherichia coli
Source: URINE

Comments: - Amoxicillin or Ampicillin should not be used for empirical treatment and for susceptible Gram Negative organisms in urine infection because it cause major collateral damage and having high infection recurrence rate. Source: IDSA Guideline. - Recommendation for Acute Cystitis -A1 - (100mg twice daily for 5 days) - Recommendation for Acute Cystitis -A1 - Trimethoprim/Sulfamethoxazole (160/800mg) -1DS tablet twice daily for 3 days.

Identification Information Analysis Time: 5.00 hours Status: Final
Selected Organism 96% Probability Escherichia coli
Bionumber: 0405610554524610

ID Analysis Messages

Susceptibility Information	Analysis Time: 7.50 hours	Antimicrobial	MIC	Interpretation	Status: Final
Amoxicillin	<= 2	S	<= 0.25	S	
Ampicillin	<= 2	S	<= 1	S	
Amoxicillin/Clavulanic Acid	<= 4	S	<= 1	S	
Piperacillin/Tazobactam	4	S	>= 32	R	
Cefuroxime	4	S	>= 4	R	
Cefuroxime Axetil	<= 1	S	<= 0.5	S	
+Cefotaxime	<= 1	S	<= 16	S	
Ceftriaxone	<= 8	S	<= 0.5	S	
Cefoperazone/Sulbactam	<= 1	S	<= 20	S	
Cefepime	<= 0.5	S			
Ertapenem	<= 0.25	S			

AES Findings Consistent
Confidence:

Page 1 of 1

MIC guiding table for interpretation of VITEK result for Enterobacteriaceae* in AST N280 panel

Antibiotic susceptibility test results are based on the isolate's MIC (Minimum Inhibitory Concentration) for tested antibiotics. Isolate's MIC for antibiotic can fall under following categories: Susceptible (S), Intermediate (I) and Resistant (R)

Antibiotic	VITEK MIC Detection Range in µg/mL for Antibiotics				Detectable MIC Range higher than Resistant MIC breakpoint
	Detectable MIC Range lower than Susceptible MIC breakpoint	S	I	R	
Ampicillin	≤2	4	≤8	16	≥32
Amoxicillin/Clavulanic Acid	≤2	4	≤8	16	≥32
Piperacillin/Tazobactam	≤4	8	≤16	32-64	≥128
Cefuroxime (Parenteral)	≤1	2	4	8	≥16
Cefuroxime Axetil (Oral)	≤1	2	4	8	≥16
Ceftriaxone	≤8	16	32	≥64	≥128
Cefoperazone/Sulbactam	≤1	2	4	8	≥16
Cefepime	≤0.5	1	2	4	≥8
Ertapenem	≤0.25	0.5	1	2	≥4
Imipenem	≤0.25	0.5	1	2	≥4
Meropenem	≤2	4	8	16	≥32
Amikacin	≤1	2	4	8	≥16
Gentamicin	≤1	2	4	8	≥16
Nalidixic Acid	≤2	4	8	16	≥32
Ciprofloxacin	≤0.25	0.5	1	2	≥4
Tigecycline	≤0.5	1	2	4	≥8
Nitrofurantoin	≤0.5	1	2	4	≥8
Colistin	≤0.5	1	2	4	≥8
Trimethoprim/Sulfamethoxazole	≤0.0625	0.125-0.5	1	2	≥4
Ciprofloxacin for salmonella spp.	≤0.0625	0.125-0.5	1	2	≥4

This MIC guiding table provides a scale to identify lower MIC by comparing antibiotic test result MIC with its respective Susceptible breakpoint.

For example: Use this MIC guiding table with VITEK test report

Vitek Test Report			MIC Guiding Table: VITEK MIC Detection Range in µg/mL for Antibiotics		
Antimicrobial	MIC	Interpretation	Antimicrobial	MIC lower than Susceptible range	S
Amikacin	4	S	Amikacin	≤2	4
Gentamicin	4	S	Gentamicin	≤1	2

Amikacin test result MIC is 4 with S - Susceptible interpretation.
Gentamicin test result MIC is 4 with S - Susceptible interpretation.

Interpretation: 1) Amikacin test result with MIC 4 is equal to the Susceptible breakpoint (S - ≤4).
2) Gentamicin test result with MIC 4 is equal to the Susceptible breakpoint (S - ≤4).

Detectable MIC range lower than Susceptible MIC breakpoint

Interacts with an MIC at or below the susceptible breakpoint are inhibited by usually achievable concentrations of antimicrobial agent resulting in likely clinical efficacy

Intermediate MIC Breakpoint

Isolate with MIC within the intermediate range that approach usually achievable blood and tissue levels and for which response rates may be lower than susceptible isolates. The intermediate category implies clinical efficacy in body sites where the drug attains pharmacologically concentrated, or when a higher than normal dosage of drug can be used.

Resistant MIC Breakpoint

Isolate with an MIC at or above the resistant breakpoint are not inhibited by the usually achievable concentrations of the agent with normal dosage schedule and/or that demonstrate MICs that fall in the range in which specific resistance mechanisms are likely and clinical efficacy of the agent against the isolate has not been shown in the treatment studies.

* Enterobacteriaceae family includes E. coli, Klebsiella spp., Enterobacter spp., Proteus spp., Serratia spp., etc.
SUS: Susceptible. Other isolates and susceptibility of an isolate dependent on the testing system that is used in the patient.

Note: 1) MIC breakpoints are based on VITEK MIC knowledge which is based on CLSI guidelines or global breakpoints and further evaluation, kindly consult microbiologist or in charge microbiologist for further information and/or report.

2) This document is for guiding purpose only and do not replace clinical assessment and judgement. For relevant resistance and further evaluation, kindly consult microbiologist or in charge microbiologist.

With its intuitive customisable reporting and seamless lab connectivity, **VITEK® 2** easily adapts to your specific needs.

RESULTS AT A GLANCE

- Immediate automatic validation and transfer of high confidence results to the LIS (auto-posting) with the ADVANCED EXPERT SYSTEM software for faster targeted therapy ^{3,10,13,15,17}
- Easy-to-use and familiar Windows® layout
- Quick access to ID and AST results using the navigation tree and filters
- Rapid result searches by patient, bench, date tested, organism, technician, accession number, etc.

CUSTOMISED REPORTING

According to your requirements using BIOART (Advanced Reporting Tool)

- Create rules based on intuitive ifthen logic
- Eliminates manual report modification
- Automatically adds customised comments and alerts when reporting critical results
- Helps implement your institutions reporting and infection control policies

QUALITY CONTROL MODULE

- Manages and reports quality control results

Tailor VITEK® 2 to your needs

CONNECTIVITY

Link to other computers and software

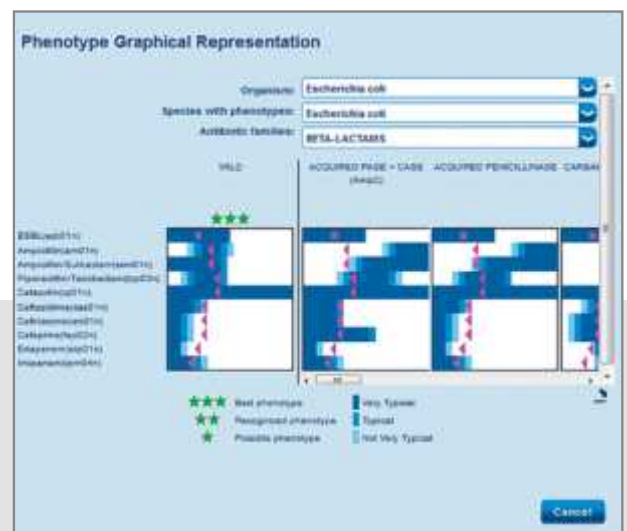
- Connect easily to your Laboratory Information System (LIS) with BCI Link (Bi-directional Computer Interface)
- VILINK® software allows remote support and troubleshooting through a secure connection and enables automatic software, firmware and security updates.

MANAGE DATA AND SAMPLE WORKFLOW

MYLA®* software simplifies lab operations

- Provides real-time instrument and sample information at your fingertips
- Offers an actionable picture of your workflow through intuitive dashboards
- Results accessible from any device, any location
- Real-time cumulative statistical functions (e.g. antibiograms)
- Enables remote access by multiple users and real-time connectivity to an existing LIS

* Optional software package



VITEK® 2

is designed to make your ID/AST workflow as **rapid** and **reliable** as possible, while still providing maximum **flexibility** and full **traceability**. Lab personnel can focus on using their expertise where its most needed.

Choose Isolate



Prepare organism suspension and ensure correct McFarland Standard with DENSICHEK® PLUS



Scan card and Isolate barcodes to establish traceability



VITEK® 2 COMPACT: Use ID suspension to make AST suspension

SAVE TIME AND STREAMLINE YOUR WORKFLOW

VITEK® 2 has the shortest hands-on-time in the industry^{1,4,8,11,12,16}

- Ergonomic automation enhances workflow¹¹
- Minimal sample preparation with up to 50% fewer steps^{11,14,16}
- Significantly less waste than other systems; up to 64% cost savings for contaminated waste disposal^{7,12,14}

FLEXIBILITY

Simultaneous access from multiple workbenches

- The barcoding system saves time and improves traceability by linking patient isolates and test cards at the bench.
- VITEK® 2 improves lab workflow by allowing patient demographics to be linked to tests at multiple benches simultaneously.
- Simultaneous multi-user access to VITEK® 2 systems lets microbiologists finalise results from individual workstations.

Focus on what matters

VITEK® 2/XL: Load cards on instrument for fully automated processing



Results in as little as 5 to 8 hours



VITEK® 2 COMPACT: Cards inoculated inside instrument and manually transferred from filling door to loading door for processing

VITEK® 2



RELIABLE, SAFE, RAPID

VITEK® 2 ID/AST cards are innovative

- Proven accuracy, with faster results, contributing to improved patient outcomes^{1-8, 10, 12}
- Minimises human error that is an inevitable part of manually reading and reviewing results^{3, 17}
- Closed system: no aerosols, splattering or spills
- Full traceability with pre-applied barcodes
- Lightweight: reduced waste and biohazard disposal costs while minimising storage space
- EUCAST and CLSI* compliant AST formulations available producing MICs based on reference CLSI and ISO MIC methods

VITEK® 2 COMPACT

* CLSI - Clinical & Laboratory Standards Institute
European Committee on Antimicrobial Susceptibility Testing

Rapid, Flexible, Efficient

Each self-contained, disposable test card provides rapid and accurate species-level identification or susceptibility results with accurate MICs* based on reference CLSI**, ISO MIC methods, EUCAST*** and US FDA****, or CLSI breakpoint interpretations.



Innovative and flexible design:

- Each card contains microwells with ID biochemicals or AST antimicrobials
- Ready and simple to use
- Pre-applied barcodes for maximum traceability
- EUCAST and CLSI compliant AST formulations available

Up to 50% fewer preparation steps than other systems.

- Inoculation with a simple, standardised suspension of organism in saline
- No reagent addition

Unique, safe, closed consumable:

- Optimal for user safety
- No aerosols, splattering, or spills
- Small, lightweight cards save on contaminated disposal costs and storage space

BROAD AND EXPANDING ID/AST TEST MENU

IDENTIFICATION CARD TYPES:

- GN (Gram negative bacilli)
156 organisms
- GP (Gram positive cocci & bacilli)
120 organisms
- ANC (anaerobes & Corynebacteria)
89 organisms
- NH (Neisseria & Haemophilus)
26 organisms
- YST (Yeast)
50 organisms

ANTIBIOTIC SUSCEPTIBILITY CARD TYPES*

- Gram negative Bacilli
76 antimicrobials and ESBL† test
- Staphylococci &/or Enterococci
55 antimicrobials, 4 high level aminoglycoside screens and ICR†† test
- Streptococci
14 antimicrobials and ICR test and gentamicin synergy
- Streptococcus pneumoniae
23 antimicrobials
- YST (Yeast)
6 antimicrobials

*Availability pending registrations as required by local regulatory authority

* Minimum Inhibitory Concentration

** Clinical & Laboratory Standards Institute

*** European Committee on Antimicrobial Susceptibility Testing

**** Food and Drug Administration

† Extended-spectrum-beta-lactamase

†† Inducible clindamycin resistance

GRAM NEGATIVE IDENTIFICATION

VITEK® 2 GN CARD
REF. 21341

ENTEROBACTERIACEAE

- *Budvicia aquatica*
- *Buttiauxella agrestis*
- *Cedecea davisae*
- *Cedecea lapagei*
- *Citrobacter amalonaticus*
- *Citrobacter braakii*
- *Citrobacter farmeri*
- *Citrobacter freundii*
- *Citrobacter koseri*
- *Citrobacter sedlakii*
- *Citrobacter youngae*
- *Cronobacter sakazakii* group ⁽¹⁾
- *Edwardsiella hoshinae*
- *Edwardsiella tarda*
- *Enterobacter aerogenes*
- *Enterobacter amnigenus* 1
- *Enterobacter amnigenus* 2
- *Enterobacter asburiae*
- *Enterobacter cancerogenus*
- *Enterobacter cloacae* complex ⁽¹⁾
- *Enterobacter gergoviae*
- *Escherichia coli*
- *Escherichia coli* O157
- *Escherichia fergusonii*
- *Escherichia hermannii*
- *Escherichia vulneris*
- *Ewingella americana*
- *Hafnia alvei*
- *Hafnia paralvei*
- *Klebsiella oxytoca*
- *Klebsiella pneumoniae* ssp. *ozaenae*
- *Klebsiella pneumoniae* ssp. *pneumoniae*
- *Klebsiella pneumoniae* ssp. *rhinoscleromatis*
- *Kluyvera ascorbata*
- *Kluyvera cryocrescens*
- *Kluyvera intermedia*
- *Leclercia adecarboxylata*
- *Moellerella wisconsensis*
- *Morganella morganii* ssp. *morganii*
- *Morganella morganii* ssp. *sibonii*
- *Pantoea agglomerans*
- *Pantoea* spp.
- *Plesiomonas shigelloides*
- *Proteus hauseri*
- *Proteus mirabilis*
- *Proteus penneri*
- *Proteus vulgaris*
- *Providencia alcalifaciens*
- *Providencia rettgeri*
- *Providencia rustigianii*
- *Providencia stuartii*
- *Rahnella aquatilis*
- *Raoultella ornithinolytica*
- *Raoultella planticola*
- *Roseomonas gilardii*

- *Salmonella enterica* ssp. *arizonae*
- *Salmonella enterica* ssp. *diarizonae*
- *Salmonella* group ⁽²⁾
- *Salmonella* ser. *Gallinarum*
- *Salmonella* ser. *paratyphi* A
- *Salmonella* ser. *typhi*
- *Serratia ficaria*
- *Serratia fonticola*
- *Serratia liquefaciens* group ⁽³⁾
- *Serratia marcescens*
- *Serratia odorifera*
- *Serratia plymuthica*
- *Serratia rubidaea*
- *Shigella* group ⁽⁴⁾
- *Shigella sonnei*
- *Tatumella ptyseos*
- *Yersinia aldovae*
- *Yersinia enterocolitica*/frederiksenii
- *Yersinia intermedia*
- *Yersinia kristensenii*
- *Yersinia pestis*
- *Yersinia pseudotuberculosis*
- *Yersinia ruckeri*
- *Yokenella regensburgei*

NON-ENTEROBACTERIACEAE

- *Achromobacter denitrificans*
- *Achromobacter xylosoxidans*
- *Acinetobacter baumannii* complex
- *Acinetobacter haemolyticus*
- *Acinetobacter junii*
- *Acinetobacter lwoffii*
- *Actinobacillus radioresistens*
- *Actinobacillus ursingii*
- *Actinobacillus ureae*
- *Aeromonas hydrophila*/ *Aeromonas caviae*
- *Aeromonas salmonicida*
- *Aeromonas sobria*
- *Aeromonas veronii*
- *Alcaligenes faecalis* ssp. *faecalis*
- *Bordetella bronchiseptica*
- *Bordetella hinzii*
- *Bordetella trematum*
- *Brevundimonas diminuta*/vesicularis
- *Brucella melitensis*
- *Burkholderia cepacia* group ⁽⁵⁾
- *Burkholderia gladioli*
- *Burkholderia mallei*
- *Burkholderia pseudomallei*
- *Chromobacterium violaceum*
- *Chryseobacterium gleum*
- *Chryseobacterium indologenes*
- *Comamonas testosteroni*
- *Cupriavidus pauculus*
- *Delftia acidovorans*
- *Elizabethkingia meningoseptica*
- *Francisella tularensis*
- *Grimontia hollisae*
- *Mannheimia haemolytica*
- *Methylobacterium* spp.
- *Moraxella* group ⁽⁶⁾
- *Myroides* spp.
- *Neisseria animaloris*/zoodegmatis
- *Ochrobactrum anthropi*
- *Oligella ureolytica*
- *Pandoraea* ssp.
- *Paracoccus yeii*
- *Pasteurella aerogenes*
- *Pasteurella canis*
- *Pasteurella dagmatis*

- *Pasteurella multocida*
- *Pasteurella pneumotropica*
- *Pasteurella testudinis*
- *Photobacterium damsela*
- *Pseudomonas aeruginosa*
- *Pseudomonas alcaligenes*
- *Pseudomonas fluorescens*
- *Pseudomonas luteola*
- *Pseudomonas mendocina*
- *Pseudomonas oleovorans*
- *Pseudomonas oryzae*habicans
- *Pseudomonas putida*
- *Pseudomonas stutzeri*
- *Ralstonia insidiosa*
- *Ralstonia mannitolilytica*
- *Ralstonia pickettii*
- *Rhizobium radiobacter*
- *Roseomonas gilardii*
- *Shewanella algae*
- *Shewanella putrefaciens*
- *Sphingobacterium multivorum*
- *Sphingobacterium spiritivorum*
- *Sphingobacterium thalpophilum*
- *Sphingomonas paucimobilis*
- *Stenotrophomonas maltophilia*
- *Vibrio alginolyticus*
- *Vibrio cholerae*
- *Vibrio fluvialis*
- *Vibrio metschnikovii*
- *Vibrio mimicus*
- *Vibrio parahaemolyticus*
- *Vibrio vulnificus*

HIGHLY PATHOGENIC ORGANISMS

- *Brucella melitensis*
- *Burkholderia mallei*
- *Burkholderia pseudomallei*
- *Escherichia coli* O157
- *Francisella tularensis*
- *Yersinia pestis*

GRAM POSITIVE IDENTIFICATION

VITEK® 2 GP CARD
REF. 21342

- *Abiotrophia defectiva*
- *Aerococcus urinae*
- *Aerococcus viridans*
- *Alloiococcus otitis*
- *Dermacoccus nishinomiyaensis* / *Kytococcus sedentarius*
- *Enterococcus avium*
- *Enterococcus casseliflavus*
- *Enterococcus cecorum*
- *Enterococcus columbae*
- *Enterococcus durans*
- *Enterococcus faecalis*
- *Enterococcus faecium*
- *Enterococcus gallinarum*
- *Enterococcus hirae*
- *Enterococcus raffinosus*
- *Enterococcus saccharolyticus*
- *Erysipelothrix rhusiopathiae*
- *Facklamia hominis*
- *Gardnerella vaginalis*
- *Gemella bergeri*
- *Gemella haemolysans*
- *Gemella morbillorum*
- *Gemella sanguinis*
- *Globicatella sanguinis*
- *Globicatella sulfidifaciens*
- *Granulicatella adiacens*
- *Granulicatella elegans*
- *Helcococcus kunzii*
- *Kocuria kristinae*
- *Kocuria rhizophila*
- *Kocuria rosea*
- *Kocuria varians*
- *Lactococcus garvieae*
- *Lactococcus lactis* ssp. *cremoris*
- *Lactococcus lactis* ssp. *lactis*
- *Lactococcus raffinolactis*
- *Leuconostoc citreum*
- *Leuconostoc lactis*
- *Leuconostoc mesenteroides* ssp. *cremoris*
- *Leuconostoc mesenteroides* ssp. *dextranicum*
- *Leuconostoc mesenteroides* ssp. *mesenteroides*
- *Leuconostoc pseudomesenteroides*
- *Listeria fleischmannii*
- *Listeria grayi*
- *Listeria innocua*
- *Listeria ivanovii*
- *Listeria monocytogenes*
- *Listeria rocourtiae*
- *Listeria seeligeri*
- *Listeria welshimeri*
- *Micrococcus luteus*/lylae
- *Pediococcus acidilactici*
- *Pediococcus pentosaceus*
- *Rothia mucilaginosa*
- *Staphylococcus arlettae*
- *Staphylococcus aureus*
- *Staphylococcus auricularis*
- *Staphylococcus capitis*
- *Staphylococcus caprae*
- *Staphylococcus carnosus* ssp. *carnosus*
- *Staphylococcus chromogenes*
- *Staphylococcus cohnii* ssp. *cohnii*
- *Staphylococcus cohnii* ssp. *urealyticus*
- *Staphylococcus epidermidis*
- *Staphylococcus equorum*
- *Staphylococcus gallinarum*
- *Staphylococcus haemolyticus*
- *Staphylococcus hominis* ssp. *hominis*
- *Staphylococcus hominis* ssp. *novobiosepticus*
- *Staphylococcus hyicus*
- *Staphylococcus intermedius*
- *Staphylococcus kloosii*
- *Staphylococcus lentus*
- *Staphylococcus lugdunensis*
- *Staphylococcus pseudintermedius*
- *Staphylococcus saprophyticus*
- *Staphylococcus schleiferi*
- *Staphylococcus sciuri*
- *Staphylococcus simulans*
- *Staphylococcus vitulinus*
- *Staphylococcus warneri*
- *Staphylococcus xylosum*

- *Streptococcus agalactiae*
- *Streptococcus alactolyticus*
- *Streptococcus anginosus*
- *Streptococcus canis*
- *Streptococcus constellatus* ssp. *constellatus*
- *Streptococcus constellatus* ssp. *pharyngis*
- *Streptococcus cristatus*
- *Streptococcus downei*
- *Streptococcus dysgalactiae* ssp. *dysgalactiae*
- *Streptococcus dysgalactiae* ssp. *equisimilis*
- *Streptococcus equi* ssp. *equi*
- *Streptococcus equi* ssp. *zooepidemicus*
- *Streptococcus equinus*
- *Streptococcus gallolyticus* ssp. *gallolyticus*
- *Streptococcus gallolyticus* ssp. *pasteurianus*
- *Streptococcus gordonii*
- *Streptococcus hyointestinalis*
- *Streptococcus infantarius* ssp. *coli* (*Str. lutetiensis*)
- *Streptococcus infantarius* ssp. *infantarius*
- *Streptococcus iniae*
- *Streptococcus intermedius*
- *Streptococcus mitis* / *Streptococcus oralis*
- *Streptococcus mutans*
- *Streptococcus ovis*
- *Streptococcus parasanguinis*
- *Streptococcus plurimalium*
- *Streptococcus pneumoniae*
- *Streptococcus porcinus*
- *Streptococcus pseudoporcinus*
- *Streptococcus pyogenes*
- *Streptococcus salivarius* ssp. *salivarius*
- *Streptococcus salivarius* ssp. *thermophilus*
- *Streptococcus sanguinis*
- *Streptococcus sobrinus*
- *Streptococcus suis* I
- *Streptococcus suis* II
- *Streptococcus thoraltensis*
- *Streptococcus uberis*
- *Streptococcus vestibularis*
- *Vagococcus fluvialis*

ANAEROBE CORYNEBACTERIA IDENTIFICATION VITEK 2 ANC CARD REF. 21347

- *Actinobaculum schaalii*
- *Actinomyces bovis*
- *Actinomyces israelii*
- *Actinomyces meyeri*
- *Actinomyces naeslundii*
- *Actinomyces neuii*
- *Actinomyces odontolyticus*
- *Actinomyces turicensis*
- *Anaerococcus prevotii*
- *Arcanobacterium haemolyticum*
- *Atopobium vaginae*
- *Bacteroides caccae*
- *Bacteroides eggerthii*
- *Bacteroides fragilis*
- *Bacteroides ovatus*
- *Bacteroides stercoris*
- *Bacteroides thetaiotaomicron*
- *Bacteroides uniformis*
- *Bacteroides vulgatus*
- *Bifidobacterium* spp.
- *Campylobacter* (*Bacteroides*) *ureolyticus*
- *Clostridium barati*
- *Clostridium bifermentans*
- *Clostridium butyricum*
- *Clostridium cadaveris*
- *Clostridium chauvoei*
- *Clostridium clostridiiforme*
- *Clostridium difficile*
- *Clostridium glycolicum*
- *Clostridium group*
- *Clostridium histolyticum*
- *Clostridium paraputrificum*
- *Clostridium perfringens*
- *Clostridium ramosum*
- *Clostridium septicum*
- *Clostridium sordellii*
- *Clostridium sporogenes*
- *Clostridium subterminale*
- *Clostridium tertium*
- *Collinsella aerofaciens*
- *Corynebacterium amycolatum*
- *Corynebacterium diphtheriae*
- *Corynebacterium jeikeium*
- *Corynebacterium minutissimum*
- *Corynebacterium pseudodiphtheriticum*
- *Corynebacterium striatum*
- *Corynebacterium ulcerans*
- *Corynebacterium urealyticum*
- *Eggerthella lenta*
- *Eggerthella cateniformis* (*Lactobacillus cateniformis*)
- *Eubacterium limosum*
- *Finnegoldia magna*
- *Fusobacterium mortiferum*
- *Fusobacterium necrophorum*
- *Fusobacterium nucleatum*
- *Fusobacterium varium*
- *Lactobacillus acidophilus*
- *Lactobacillus buchneri*
- *Lactobacillus casei*
- *Lactobacillus fermentum*
- *Lactobacillus gasseri*
- *Lactobacillus hilgardii*
- *Lactobacillus parabuchneri*
- *Lactobacillus paracasei*
- *Lactobacillus plantarum*
- *Microbacterium flavescens*
- *Micobacterium* ssp.
- *Parabacteroides distasonis*
- *Parabacteroides merdae*
- *Parvimonas micra*
- *Peptoniphilus asaccharolyticus*
- *Peptoniphilus indolicus*
- *Peptostreptococcus anaerobius*
- *Porphyromonas gingivalis*
- *Prevotella bivia*
- *Prevotella buccae*
- *Prevotella disiens*

- *Prevotella denticola*
- *Prevotella intermedia*
- *Prevotella melaninogenica*
- *Prevotella oralis*
- *Prevotella oris*
- *Propionibacterium acnes*
- *Propionibacterium granulosum*
- *Propionibacterium propionicum* (*Propionibacterium propionicus*)
- *Staphylococcus saccharolyticus*
- *Trueperella pyogenes* (*Arcanobacterium pyogenes*)
- *Turicella otitidis*
- *Veillonella* spp.
- *Candida catenulata*
- *Candida colliculosa*
- *Candida dubliniensis*
- *Candida duobushaemulonii*
- *Candida famata*
- *Candida freyschussii*
- *Candida glabrata*
- *Candida guilliermondii*
- *Candida haemulonii*
- *Candida haemulonii* var. *vulnera*
- *Candida inconspicua* / *Candida lambica*
- *Candida intermedia*
- *Candida kefyr*
- *Candida krusei*
- *Candida lipolytica*
- *Candida lusitanae*
- *Candida magnoliae*
- *Candida norvegensis*
- *Candida parapsilosis*
- *Candida pelliculosa*
- *Candida pulcherrima*
- *Candida rugosa*
- *Candida sake*
- *Candida spherica*
- *Candida tropicalis*
- *Candida utilis*
- *Candida zeylanoides*
- *Cryptococcus albidus*
- *Cryptococcus gattii*
- *Cryptococcus laurentii*
- *Cryptococcus neoformans*
- *Cryptococcus terreus*
- *Cryptococcus uniguttulatus*
- *Geotrichum klebahnii*
- *Kloeckera* spp.
- *Kodamaea ohmeri*
- *Malassezia furfur*
- *Malassezia pachydermatis*
- *Milleromyces farinosa* (*Pichia farinosa*)
- *Prototheca wickerhamii*
- *Prototheca zopfii*
- *Rhodotorula glutinis* / *Rhodotorula mucilaginosa*
- *Rhodotorula minuta*
- *Saccharomyces cerevisiae*
- *Saprochaete capitata* (*Geotrichum capitatum*)
- *Sporobolomyces salmonicolor*
- *Stephanoascus ciferrii*
- *Trichosporon asahii*
- *Trichosporon inkin*
- *Trichosporon mucoides*
- *Zygosaccharomyces bailii*
- *Zygosaccharomyces spp*

NEISSERIA HAEMOPHILUS IDENTIFICATION VITEK 2 NH CARD REF. 21346

- *Actinobacillus pleuropneumoniae*
- *Actinobacillus suis*
- *Actinobacillus ureae*
- *Aggregatibacter actinomycetemcomitans*
- *Aggregatibacter aphrophilus*
- *Aggregatibacter segnis*
- *Campylobacter coli*
- *Campylobacter fetus* ssp. *fetus*
- *Campylobacter jejuni* ssp. *jejuni*
- *Capnocytophaga* spp.
- *Cardiobacterium hominis*
- *Eikenella corrodens*
- *Gardnerella vaginalis*
- *Haemophilus haemolyticus*
- *Haemophilus influenzae*
- *Haemophilus parahaemolyticus*
- *Haemophilus parainfluenzae*
- *Histophilus somni*
- *Kingella denitrificans*
- *Kingella kingae*
- *Moraxella* (*Branhamella*) *catarrhalis*
- *Moraxella* (*Neisseria*) *ovis*
- *Neisseria cinerea*
- *Neisseria elongata*
- *Neisseria gonorrhoeae*
- *Neisseria lactamica*
- *Neisseria meningitidis*
- *Neisseria sicca*
- *Neisseria weaver*
- *Oligella urethralis*
- *Riemerella anatipestifer*
- *Suttonella indologenes*

YEAST IDENTIFICATION VITEK 2 YST CARD REF. 21343

- *Candida albicans*
- *Candida auris*
- *Candida boidinii*

- 1) *Burkholderia cepacia*, *Cronobacter sakazakii*, *Enterobacter cloacae*
- 2) *Salmonella enterica* ssp. *enterica*, *S.typhimurium*, *S.enteritidis*, *S.spp*, *S.ser.Paratyphi B*, *S.ser.Paratyphi C*
- 3) *Serratia grimesii*, *Ser.liquefaciens*, *Ser.proteamaculans* ssp. *proteamaculans*
- 4) *Shigella flexneri*, *Shi.boydii*, *Shi.dysenteriae*
- 5) *Burkholderia cepacia*, *B.multivorans*, *B.stabilis*, *B.vietnamiensis*
- 6) *Moraxella lacunata*, *M.nonliquefaciens*, *M.osloensis*

India specific card

Customization of Antibiotic panels to meet your needs

- Designed to detect prevailing/emerging antibiotic resistance
- Customised as per prescribing habits of clinicians
- MIC breakpoint are based on latest CLSI guidelines
- Availability of antibiotics at pharmacy



PANEL FOR GNB REF-414532

Product Description: AST N281

Amikacin
Aztreonam
Cefepime
Cefoperazone/Sulbactam
Ceftazidime
Ciprofloxacin
Colistin
Doripenem
Gentamicin
Imipenem
Levofloxacin
Meropenem
Minocycline
Piperacillin/Tazobactam
Ticarcillin/Clav. Acid
Tigecycline
Trimethoprim/Sulfa

PANEL FOR GNB REF-413170

Product Description: AST N235

Amikacin
Amoxicillin/Clav.acid (CLSI)
Ampicillin
Cefalotin
Cefixime
Cefoxitin
Ceftazidime
Ceftriaxone
Ciprofloxacin
Ertapenem
Fosfomycin
Gentamicin
Nalidixic Acid
Nitrofurantoin
Norfloxacin
Ofloxacin
Piperacillin/Tazobactam
Ticarcillin
Trimethoprim/Sulfa

PANEL FOR GPC REF-414534

Product Description: AST P628

Benzylpenicillin
Cefoxitin Screen
Ciprofloxacin
Clindamycin
Daptomycin
Erythromycin (for CLSI only)
Gentamicin
Gentamicin HL (CLSI)
Inducible Clindamycin Resistance
Levofloxacin
Linezolid
Nitrofurantoin
Oxacillin
Rifampicin
Teicoplanin
Tetracycline
Tigecycline
Trimethoprim/Sulfa
Vancomycin

PANEL FOR STREP REF-421040

Product Description: AST ST03

Ampicillin
Benzylpenicillin
Cefotaxime
Ceftriaxone
Chloramphenicol
Clindamycin
Erythromycin
Gentamicin
Inducible Clindamycin Resistance
Levofloxacin
Moxifloxacin
Linezolid
Tetracycline
Tigecycline
Trimethoprim/Sulfa
Rifampicin
Vancomycin
Teicoplanin

PANEL FOR GNB REF-414531

Product Description: AST N280

Amikacin
Amoxicillin/Clav.acid (CLSI)
Ampicillin
Cefepime
Cefoperazone/Sulbactam
Ceftriaxone
Cefuroxime
Ciprofloxacin
Colistin
Ertapenem
Gentamicin
Imipenem
Meropenem
Nalidixic Acid
Nitrofurantoin
Piperacillin/Tazobactam
Tigecycline
Trimethoprim/Sulfa

PANEL FOR YEAST REF-420729

Product Description: AST YS08

Amphotericin B
Caspofungin
Fluconazole
Flucytosine
Micafungin
Voriconazole



Flexibility to meet your workflow needs

VITEK® 2 COMPACT



CAPACITY OPTIONS 30, or 60 cards per instrument	DIMENSIONS 72 x 68 x 60 cm	ELECTRICAL REQUIREMENTS 100/120 VAC (50-60 Hz) or 220/240 VAC (50-60 Hz)	ENVIRONMENTAL REQUIREMENTS Operating ambient temperature range of 15 °C to 30 °C Operating humidity range: 20% to 80% relative humidity, non-condensing
CONNECTIONS 4 instruments can be connected to the same PC	WEIGHT 75 kg	HEAT DISSIPATED 1025 BTU/Hr. (nominal)	ALTITUDE up to 2,000 m

VITEK® 2



CAPACITY 60 cards per instrument	DIMENSIONS 100 x 71 x 67 cm	ELECTRICAL REQUIREMENTS 100/120 VAC (50-60 Hz) or 220/240 VAC (50-60 Hz)	ENVIRONMENTAL REQUIREMENTS Operating ambient temperature range of 20 °C to 30 °C Operating humidity range: 20% to 80% relative humidity, non-condensing
CONNECTIONS 4 instruments can be connected to the same PC	WEIGHT 110 kg	HEAT DISSIPATED 512 BTU/Hr. (nominal)	ALTITUDE up to 2,000 m

VITEK® 2 XL



CAPACITY 120 cards per instrument	DIMENSIONS 140 x 71 x 67 cm	ELECTRICAL REQUIREMENTS 100/120 VAC (50-60 Hz) or 220/240 VAC (50-60 Hz)	ENVIRONMENTAL REQUIREMENTS Operating ambient temperature range of 20 °C to 30 °C Operating humidity range: 20% to 80% relative humidity, non-condensing
CONNECTIONS 4 instruments can be connected to the same PC	WEIGHT 145 kg	HEAT DISSIPATED 682 BTU/Hr. (nominal)	ALTITUDE up to 2,000 m