

thermo scientific



European AST plate guide

# Thermo Scientific Sensititre System

for antimicrobial susceptibility testing

**ThermoFisher**  
SCIENTIFIC





In 1928, the discovery of penicillin revolutionized medicine. Ever since, the use of antibiotics to treat and prevent bacterial infections has saved innumerable lives, enabled advancements in medical procedures like surgery and chemotherapy, and helped slow the spread of deadly infections.

However, after nearly 100 years of widespread antibiotic use, the threat posed by evolving bacteria possessing resistance to common antibiotics has emerged as one of the most significant global health issues of the 21st century. Antimicrobial resistance is present in every country, increases healthcare costs, and is accelerating due to the misuse and overuse of antibiotics in both people and animals.

The ability to treat infections quickly and accurately with the information obtained from antimicrobial susceptibility testing (AST) is of the utmost importance for combating resistance. Access to an AST device with the most up-to-date antimicrobials is vital to expanding patient treatment options and improving patient outcomes.

“Antimicrobial resistance (AMR) is a threat to global health and development and is estimated to contribute to more than five million deaths globally each year. We need urgent global action, using a One Health approach, to keep our precious medicines working.”<sup>1</sup>

Dr. Tedros Adhanom Ghebreyesus  
Director-General, WHO

<sup>1</sup> World Health Organization. The WHO AWaRe (Access, Watch, Reserve) antibiotic book. Retrieved from: <https://www.who.int/publications/i/item/9789240062382>



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# Thermo Scientific Sensititre System

Confidently identify bacterial pathogens and detect emerging antibiotic resistance with the gold standard equivalent<sup>1</sup> accuracy of broth microdilution combined with the time-saving benefits of automation to optimize patient care, support antimicrobial stewardship, and improve lab efficiency.

With a proven history of AST accuracy, the Sensititre System delivers accurate antimicrobial susceptibility testing (AST) for the most commonly prescribed antibiotics as well as novel, last-resort therapies.

## Select Plate



**Sensititre Standard AST Plates**—choose from our wide selection of standard plates to suit your application, including Gram positive, Gram negative, fastidious, mycobacteria and yeast formats.



**Sensititre Custom AST Plates**—design your own plate from our selection of over 300 antimicrobials. We offer one of the widest, most up-to-date selections of antimicrobials, available in wide dilution ranges.

## Inoculum



**Thermo Scientific™ Sensititre™ Nephelometer**—a simple solution for inoculum density measurements and standardize inoculation preparation.

► See page 9



**Thermo Scientific™ Sensititre™ 8-Channel Programmable Pipette**—quick and accurate manual inoculation of microtitre plates, with enhanced ergonomics.



**Thermo Scientific™ Sensititre AIM™ Automated Inoculation Delivery System**—automatically doses Sensititre plates eliminating skipped wells and costly repeat tests.

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## Inoculate

<sup>1</sup> Gram negative anaerobe susceptibility testing in clinical isolates using Sensititre and Etest methods.  
C. Hughes, C. Ashurst-Smith, J.K. Ferguson. Pathology Volume 50, Issue 4, June 2018.



Choose from a full range of standard AST plates to use with the Sensititre AST System or design your own customized plate tailored to your formulary with access to over 300 antimicrobials and broad dilution ranges. Consolidate your susceptibility testing on a single platform.

The Sensititre System is a scalable and flexible solution, accommodating microbiology laboratories of all sizes:

### Incubate



**Sensititre ARIS HiQ System**—individually incubates 100 MIC, breakpoint or identification plates, ensuring optimal growth conditions and eliminating offline or supplementary testing.

► [See page 6](#)

### Read



**Thermo Scientific™ Sensititre™ OptiRead™ Automated Fluorometric Plate Reading System**—utilizes fluorescence detection technology to automate Sensititre plate reading, delivering fast, accurate results, and directly linking to the Sensititre SWIN Software System to automate interpretation and result reporting.

► [See page 9](#)



**Thermo Scientific™ Sensititre™ Vizion™ Digital MIC Viewing System**—captures and stores easy-to-read digital plate images for optimized manual reading and traceability and connects to the Sensititre SWIN Software System for automated interpretation and reporting of results.

► [See page 8](#)

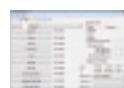


**Thermo Scientific™ Sensititre™ Manual Viewbox**—perform simple visual reads of your 96-well microtitre plates with our mirrored viewbox.

### Interpret



**Thermo Scientific™ Sensititre™ SWIN™ Software System, Complete**—consolidates Sensititre results from manual and automated reading options on a single software platform.



**Sensititre SWIN Epidemiology Module**—provides comprehensive reporting of AST results to help detect, monitor, and investigate local antibiotic resistance patterns to facilitate decision-making and support antimicrobial stewardship programs.

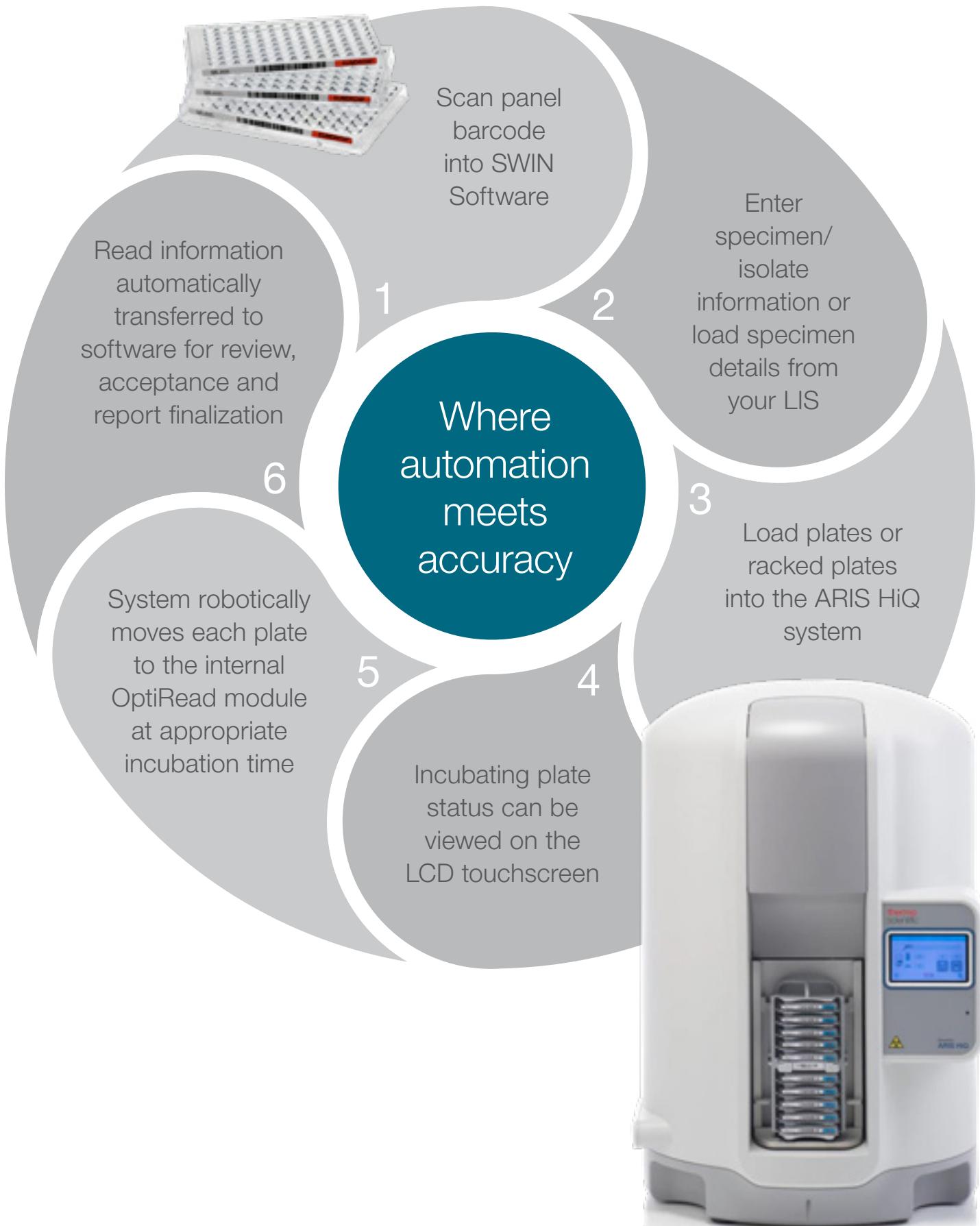
# Thermo Scientific Sensititre ARIS HiQ System

The Sensititre System utilizes gold standard-equivalent MIC accuracy, providing superior quality and reproducibility for accurate results the first time. Reduce the number of re-tests and confirmatory tests required, saving time, and decreasing costs, and report results with more confidence.

Choose from a full range of standard AST plates to use with the Thermo Scientific Sensititre ARIS HiQ System or design your own customized plate tailored to your formulary with access to over 300 antimicrobials and broad dilution ranges.

- Immediate easy access with intuitive integrated LCD touchscreen user-interface. Access critical test information 24/7 directly at instrument, on software or through an LIS interface
- Automated reads deliver worry-free results. Streamlined workflow with flexible load/unload capabilities via removable plate racks, enhanced loading and batch load/unload functions
- A large capacity with a small footprint, the ARIS HiQ offers automated processing of up to 100 plates all handled by an internal robotic arm working in tandem with advanced plate sorting algorithms to deliver efficient plate removal





# Vizion Digital MIC Viewing System

Manual Sensititre Plate reading with the Vizion System generates digital plate images for efficient and accurate reading/recording, and via the Sensititre SWIN Software enables interpretation of antimicrobial susceptibility plate results.

Plates can be quickly inserted into the loading tray, with user customizable lighting options to facilitate optimal calibration for each organism type. Directly select microbial inhibitory concentrations (MIC) on-screen, within a predefined supportive template.

The Vizion System reduces risk associated with manual recording errors, and delivers immediate data review options to apply interpretations, access the Expert System, or transfer results through the laboratory information management system (LIS/LIMS).



- Semi-automated touchscreen driven reading and interpretation with an auditable/recorded reference image
- Works in parallel with SWIN Software offering LIS connectivity

# Sensititre AIM Automated Inoculation Delivery System

Quickly and accurately dose 96-well microtitre Sensititre Plates, eliminating both skipped wells and costly repeat tests, with the Sensititre AIM. Simply select dosing volume and pattern, with the easy-to-use, icon-driven touch screen for simple, intuitive plate inoculation.

By minimizing sample contact the AIM System mitigates risks associated with cross-contamination, aerosol exposure, and bio-hazardous spills.

The compact, user-friendly design, also reduces risks associated with skipped wells and pipetting errors.



- Accurate dosing of Sensititre plates
- Intuitive icon-driven touch screen
- Reduces the risk of pipetting errors and skipped wells

# OptiRead Automated Fluorometric Plate Reading System

Maximize consistency and eliminate manual reading errors with fast, accurate and automated Sensititre plate reads using the OptiRead Automated Fluorometric Plate Reading System.

The OptiRead System uses fluorescent detection technology to automate Sensititre plate reading, delivering fast, accurate results, and directly linking to the Sensititre SWIN Software System to automate interpretation and result reporting. Quickly transfer test results for processing, interpretation and report generation, thus improving laboratory efficiency and productivity. Combining user-friendly automation in a compact, lightweight design, the OptiRead System facilitates efficient workflows for busy laboratories that value consistent reporting standards.

- Fast fluorescent Sensititre plate reads
- Eliminate manual reading steps, improve laboratory efficiency and productivity
- Automated read, interpretation and results reporting
- Maintain consistent reporting standards



## Nephelometer

Optimize performance and achieve accurate results by standardizing bacterial suspension density with the Nephelometer.

Designed to rapidly prepare a consistent inoculum density, the easy-to-read LED indicator light offers a quick methodology to produce bacterial suspensions equivalent to the required 0.5 McFarland Standard.

The Sensititre Nephelometer reduces the risk of manual errors associated with targeting numeric values, by guiding the user to increase/decrease the concentration of emulsified test colonies, until a green “in range” result is achieved – indicating that the suspension is ready for addition to the chosen test broth.

# The value of accurate MICs supports future stewardship

Health care practitioners have known for some time that delivering continuous improvements to antibiotic stewardship efforts relies on striving to select the most appropriate antibiotic, at the right dose, followed by pathogen-specific antibiotic therapy with an appropriate duration<sup>1</sup>.

Broth microdilution is the reference method for antimicrobial susceptibility testing<sup>2</sup>, and this will remain the case in the foreseeable future even with improving molecular techniques (that act as useful pre-screening predictive tools), as there is still a significant level of resistance to antimicrobials that is not explained by DNA genetics alone<sup>3</sup>. Sensititre Systems use broth microdilution to deliver a minimum inhibitory concentration (MIC) that details the level of antimicrobial required to achieve inhibition against the tested clinical isolate.

Less favorable outcomes frequently occur when patients are given low doses<sup>4</sup>, where organisms for which MICs are at the marginal

points of susceptibility are more likely to develop resistance. This is particularly significant when treating marginally susceptible species, where clinical success is more likely if the right dosing strategy is applied, as well as the right antibiotic - and confidence in the accuracy of MIC data gives further assurance in treatment strategy.

Some AST systems calculate the MIC value by extrapolating growth curves and applying dedicated algorithms<sup>5</sup>. The Sensititre System generates true MIC values based on actual growth of the organism. An accurate MIC not only reveals the difference between whether a bacterial isolate is susceptible but also how susceptible the organism is against a particular drug, and the exact point at which the isolate becomes resistant. When comparing your MIC results against the latest clinical breakpoints from EUCAST and CLSI, you can trust the value of a true MIC to deliver the accuracy required for optimal patient outcomes, and to track emerging resistance.

**“To be able to get an accurate measurement of MIC for very specific drugs like vancomycin, for me, is wonderfully valuable.”**

Dr. James McKinnell, Assistant Professor of Medicine, David Geffen School of Medicine, University of California, Los Angeles

1 Antimicrobial Stewardship. Shira Doron, MD and Lisa E. Davidson, MD. Mayo Clin Proc. 2011 Nov; 86(11): 1113–1123.

2 Reading and understanding an antibiogram. Tascini, C. *et al.* Italian Journal of Medicine 2016; volume 10:289-300

3 Innovative and rapid antimicrobial susceptibility testing systems. van Belkum, A., Burnham, C.A.D., Rossen, J.W.A. *et al.* Nat Rev Microbiol 18, 299–311 (2020).

4 Pharmacodynamics of intravenous ciprofloxacin in seriously ill patients. Forrest A, *et al.* Antimicrob Agents Chemother. 1993;5:1073–81.

5 MIC-based dose adjustment: facts and fables. Mouton JW, Muller AE, Canton R, Giske CG, Kahlmeter G, Turnidge J. J Antimicrob Chemother. 2018 Mar 1;73(3):564-568



# Custom capabilities

Transform your susceptibility testing to meet the demands of your stewardship program and the needs of your unique formulary requirements or patient population. With access to over 300 antimicrobials at customized dilutions, tailor-made AST couldn't be simpler.

The Sensititre System's custom plate capabilities enable you to design a plate format tailored to your formulary for clinical, veterinary and surveillance applications.

Let us help you identify the custom AST solution that fits the needs of your lab.

## Greater flexibility

Over 300 antimicrobials available for clinical, veterinary and surveillance applications; available as frozen or dried formats

## Performance

Superior reproducibility for accurate results, first time; consolidate testing onto one format to reduce unnecessary testing protocols, off line testing and associated costs

## Custom design

Easily adapt formulary requirements and prescription protocols to monitor local resistance

## Scalable

Choose from a variety of flexible instrumentation options to streamline your workflow and meet your specific workload and budget requirements



Join the global initiative to combat antimicrobial resistance through the effective use of antimicrobials in children, young people, adults and animals by assisting your clinical colleagues in delivering accurate and actionable MIC results tailored to your patient or animal population.

# Customized formats for every AST workflow

## Thermo Scientific™ Sensititre™ Custom Plates

Our custom plates let you tailor your AST to your antimicrobial formulary and test population, supporting antibiotic stewardship protocols. In just four steps, our team assists with customization, ensuring timely, pertinent AST results based on real-time resistance trends and local epidemiology.

The goal? Better patient outcomes and effective AMR management.

### ■ Design

Customize antimicrobials and dilutions based on your formulary requirements and local test population.

### ■ Approval

Plates undergo a rigorous review against quality and regulatory benchmarks.

### ■ Order

Post-approval, Sensititre custom plates are ready for production.

### ■ Delivery

Every custom plate includes the Sensititre SWIN Software script, tailored to your design, ensuring results are reported with the correct interpretive criteria.





Not only is it critical to identify new antimicrobics but also to incorporate them into a reliable testing device to accurately negotiate optimum patient treatment.

Treating multi-drug resistant infections and monitoring emergent multi-drug resistance is more important now than ever. Increasingly, there are fewer antimicrobial drugs available to effectively treat common as well as life-threatening infections\*.

With this in mind, we are dedicated in our collaboration with pharmaceutical companies developing new antimicrobials and expediting their incorporation into our gold standard-equivalent<sup>1</sup> Sensititre plate portfolio. If you require early access to a broth microdilution (BMD) MIC test, Sensititre is the only platform to offer a solution.

The latest antimicrobials include\*\*:

- Imipenem/relebactam
- Meropenem/vaborbactam
- Sulbactam/durlobactam<sup>#</sup>

Reduce offline testing, improve workflow efficiencies and provide accurate MIC results with Sensititre AST plates in off-the shelf, standard formats or customized to your specific needs.

**"Current research has demonstrated that the spread of multi-drug resistant organisms are largely driven by the physical movement of patients. As a result, hospitals that have never seen a pan-resistant *Acinetobacter baumanii* or pan beta-lactam-resistant *Pseudomonas aeruginosa* are only one admission away from seeing their first case.<sup>2</sup>"**

MDRO FORMATS	EUMDRXXF	CUSTOM CAPABILITIES
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**19**

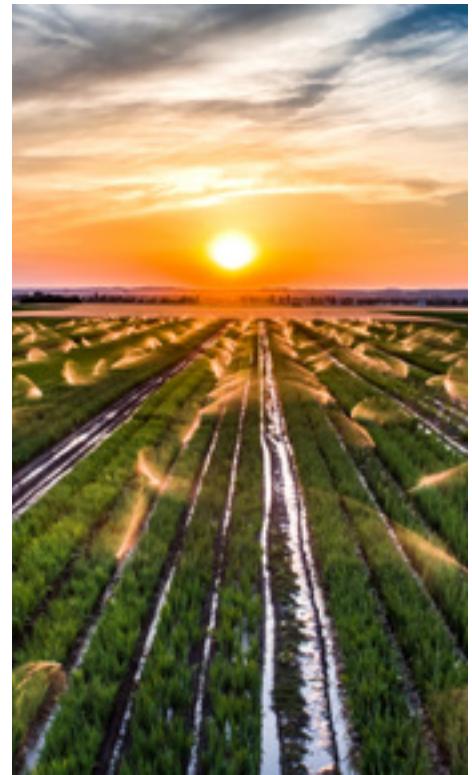
**12**

\* World Health Organization, 2014. Antimicrobial resistance global report on surveillance. \*\* Availability of antimicrobials varies per region. Please contact your local Thermo Fisher Scientific Microbiology representative for more information. 1. Gram negative anaerobe susceptibility testing in clinical isolates using Sensititre and ETest methods. C. Hughes, C. Ashurst-Smith, J.K. Ferguson. Pathology Volume 50, Issue 4, June 2018. 2. Dr. James McKinnell, Associate Professor of Medicine, David Geffen School of Medicine, University of California, Los Angeles. Thermo Fisher Scientific products are distributed globally so uses, applications, and availability of product in each country depend on local regulatory marketing authorization status. \*For research use only. Not for use in diagnostic procedures.

# Driving the One Health Quadripartite's approach to combat antimicrobial resistance

## Our health is all connected

Whether the patient has fur, feathers, or skin, accurate testing is paramount in diagnosing and treating infections.



Our **clinical** portfolio helps optimize treatment for the critically ill, promoting better patient outcomes.

Our **veterinary** solutions can be used to detect resistance in a wide range of animals, from pets and livestock to wildlife, using species-specific formats.

Our **environmental** capabilities help to determine pathogen antimicrobial susceptibility patterns in food, animals, water and the environment, making us the system of choice for many global surveillance organizations.

As the threat of antimicrobial resistance escalates, faster, more accurate testing of an ever-evolving range of infections is vital to improving patient outcomes.

## Clinical standard plate formats

		INSTRUMENTS	USE AND METHODOLOGY	GRAM NEGATIVE First line	GRAM NEGATIVE Second line	NON-FERMENTERS	GRAM POSITIVE	FR2STENT	
FLUORESCENT PLATES	AUTOREAD (ARIS HiQ, OptiRead, Manual Viewbox, Vizion)	RUO	EUGNF	DKMGN	EUMDRXXF	EURGNCOL	EUX2NF	EUENCF	
		IVD-CE (CLSI)						EUSTAFF	
		IVD-CE (EUCAST)	●		●		●	●	
NON-FLUORESCENT PLATES	SEMI-AUTOMATED AND MANUAL READ (Manual Viewbox, Vizion)	RUO							
		IVD-CE (CLSI)							
		IVD-CE (EUCAST)		●		●			
Jump to page ►				18	19	20	21	22	
				24	25	26			



		INSTRUMENTS	USE AND METHODOLOGY	FASTIDIOUS	ANAEROBES	YEAST	MYCOBACTERIA	SLOMYCOI	RAPMVCOI	MYCOTBI	ITAMYUCC
FLUORESCENT PLATES	<b>AUTOREAD</b> (ARIS HiQ, OptiRead, Manual Viewbox, Vizion)	RUO		HPB1	ANAERO3	Y0-10					
IVD-CE (CLSI)											
IVD-CE (EUCAST)											
NON-FLUORESCENT PLATES	<b>SEMI-AUTOMATED AND MANUAL READ</b> (Manual Viewbox, Vizion)	RUO									
IVD-CE (CLSI)		●	●	●	●	●	●	●	●	●	●
IVD-CE (EUCAST)											

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# Sensititre Gram Negative EUGNF Plate

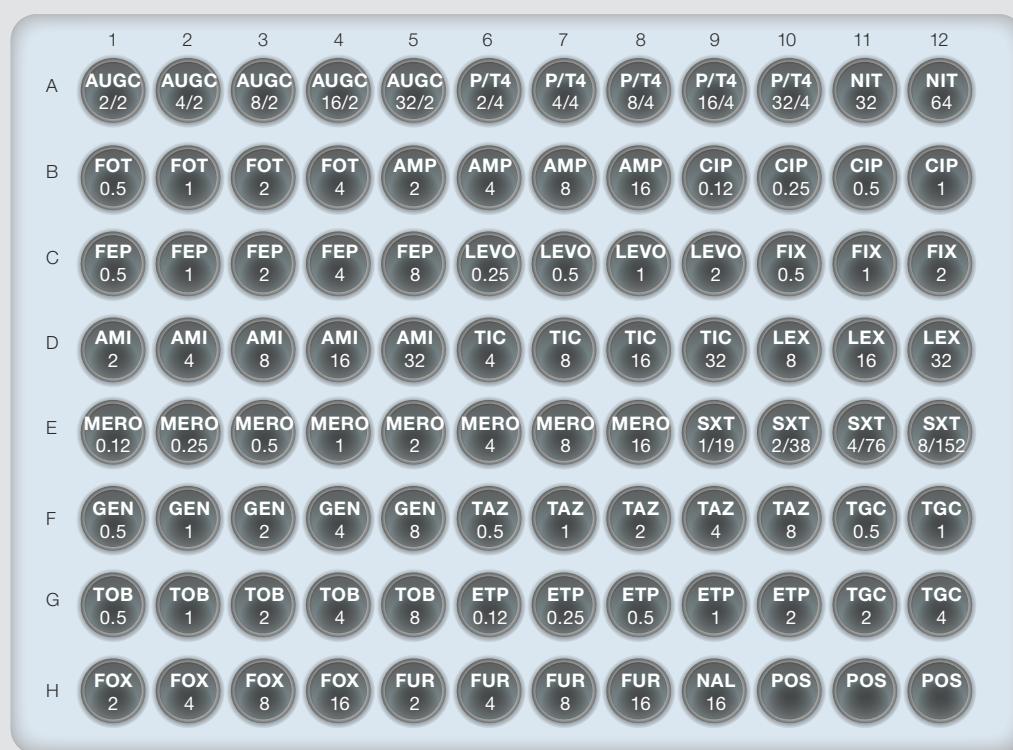
Intended use	Read method	EUCAST recommended routine QC strains	
Antimicrobial susceptibility plate for testing non-fastidious Gram negative isolates	Autoread or manual Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007) Sensititre OptiRead (V3030)		
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607050 R4601971 R4603074 R4607060 R4601314	<i>Escherichia coli</i> ATCC® 25922™ <i>Escherichia coli</i> ATCC® 35218™ <i>Klebsiella pneumoniae</i> ATCC® 700603™ <i>Pseudomonas aeruginosa</i> ATCC® 27853™ <i>Escherichia coli</i> NCTC 13846
Additional QC strains used for product release		R4607030 R4607011	<i>Enterococcus faecalis</i> ATCC® 29212™ <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer. Mix 1 µL\*, 10 µL\*\*, or 30 µL\*\*\* of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator or Sensititre ARIS HiQ for 18-24 hours

Manually read with Sensititre Vizion or Sensititre Manual Viewbox. Read automatically with ARIS HiQ or OptiRead, read manually with Vizion or Manual Viewbox



## Antimicrobics

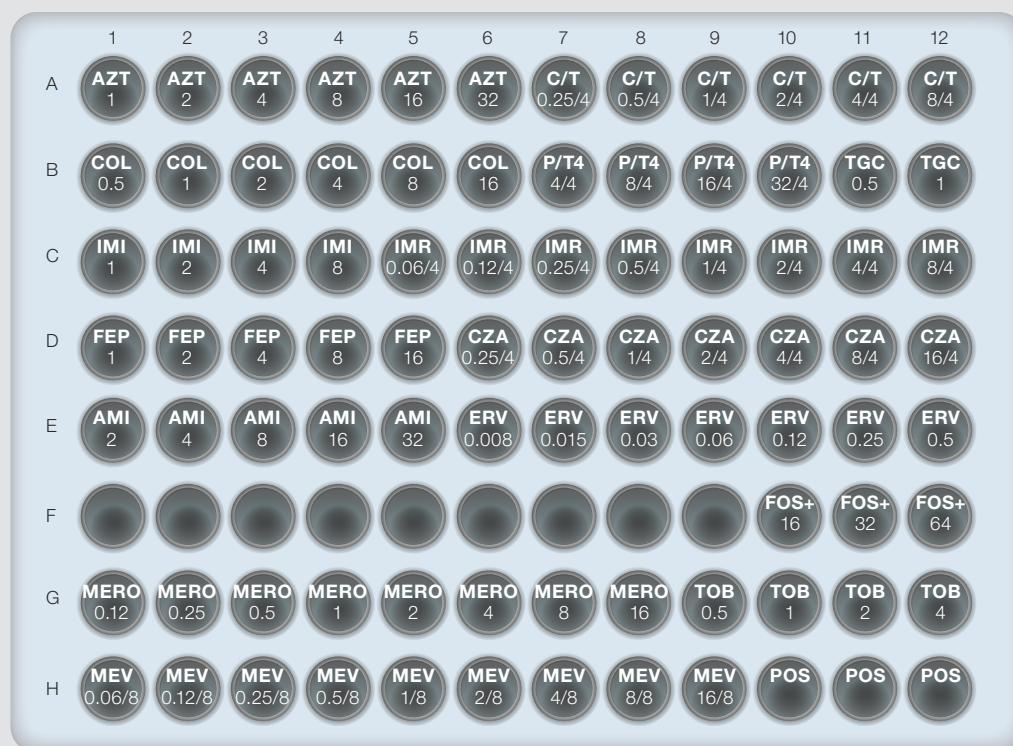
AMI	Amikacin
AUGC	Amoxicillin / Clavulanic acid constant 2
AMP	Ampicillin
FEP	Cefepime
FIX	Cefixime
FOT	Cefotaxime
FOX	Cefoxitin
TAZ	Ceftazidime
FUR	Cefuroxime
LEX	Cephalexin
CIP	Ciprofloxacin
ETP	Ertapenem
GEN	Gentamicin
LEVO	Levofloxacin
MERO	Meropenem
NAL	Nalidixic acid
NIT	Nitrofurantoin
P/T4	Piperacillin / Tazobactam constant 4
POS	Positive control
TIC	Ticarcillin
TGC	Tigecycline
TOB	Tobramycin
SXT	Trimethoprim / Sulfamethoxazole

\*For *Proteus* spp. \*\*For Enterobacteriaceae and Non-Enterobacteriaceae. \*\*\*For aid in detection of resistance mechanisms for Enterobacteriaceae and Non-Enterobacteriaceae.

# Sensititre Gram Negative EUMDRXXF Plate

## with Imipenem/Relebactam and Meropenem/Vaborbactam

Intended use	Read method	EUCAST recommended routine QC strains	
Broth type	Inoculum preparation		
Antimicrobial susceptibility plate for testing non-fastidious Gram negative isolates	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607050	<i>Escherichia coli</i> ATCC® 25922™
Sensititre Mueller Hinton Broth (T3462)™	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4601316	<i>Klebsiella pneumoniae</i> ATCC® BAA-2814™
		R4603074	<i>Klebsiella pneumoniae</i> ATCC®700603™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4601314	<i>Escherichia coli</i> NCTC 13846
		Additional QC strains used for product release	
		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
		R4609384	<i>Klebsiella pneumoniae</i> ATCC® BAA-1705™



### Antimicrobics

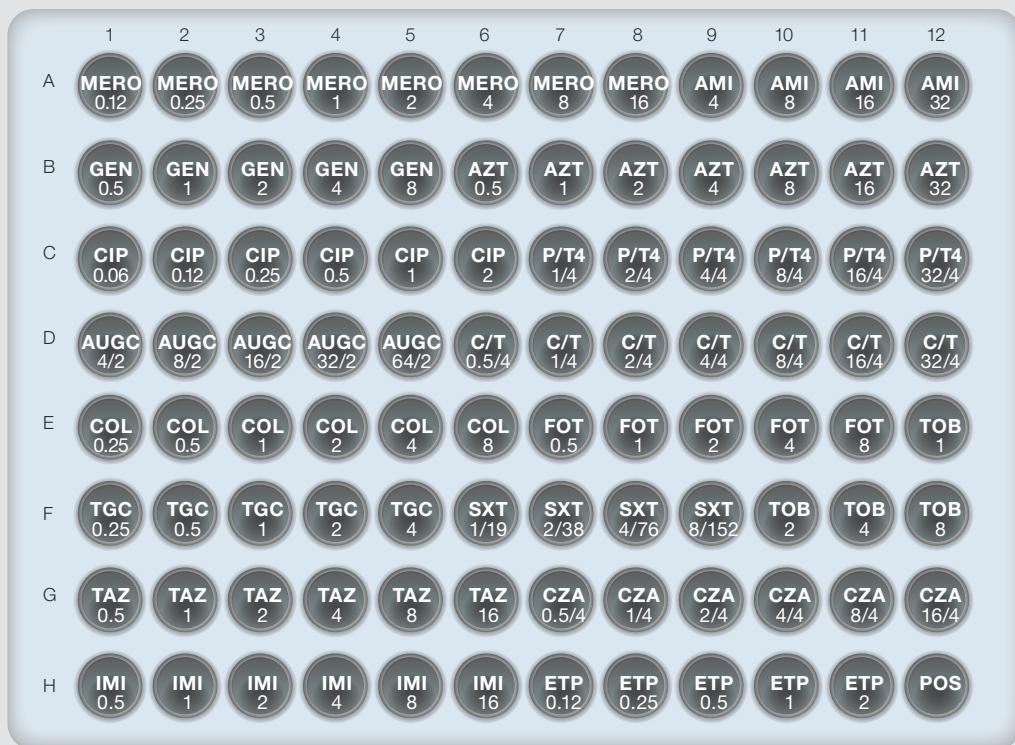
AMI	Amikacin
AZT	Aztreonam
FEP	Cefepime
CZA	Ceftazidime / Avibactam constant 4
C/T	Ceftolozane / Tazobactam constant 4
COL	Colistin
ERV	Eravacycline
FOS+	Fosfomycin+glucose-6-phosphate
IMI	Imipenem
IMR	Imipenem / Relebactam constant 4
MERO	Meropenem
MEV	Meropenem / Vaborbactam constant 8
P/T4	Piperacillin / Tazobactam constant 4
POS	Positive control
TGC	Tigecycline
TOB	Tobramycin

\*For *Proteus* spp. \*\*For Enterobacteriaceae and Non-Enterobacteriaceae. \*\*\*For aid in detection of resistance mechanisms for Enterobacteriaceae and Non-Enterobacteriaceae.

# Sensititre Gram Negative DKGHN Plate

## with Colistin, Ceftazidime/Avibactam and Ceftolozane/Tazobactam

Intended use	Read method	EUCAST recommended routine QC strains	
Antimicrobial susceptibility plate for testing non-fastidious Gram negative isolates	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
<b>Broth type</b>	<b>Inoculum preparation</b>	R4607050	<i>Escherichia coli</i> ATCC® 25922™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4603074	<i>Klebsiella pneumoniae</i> ATCC®700603™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4601314	<i>Escherichia coli</i> NCTC 13846
		Additional QC strains used for product release	
		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



### Antimicrobics

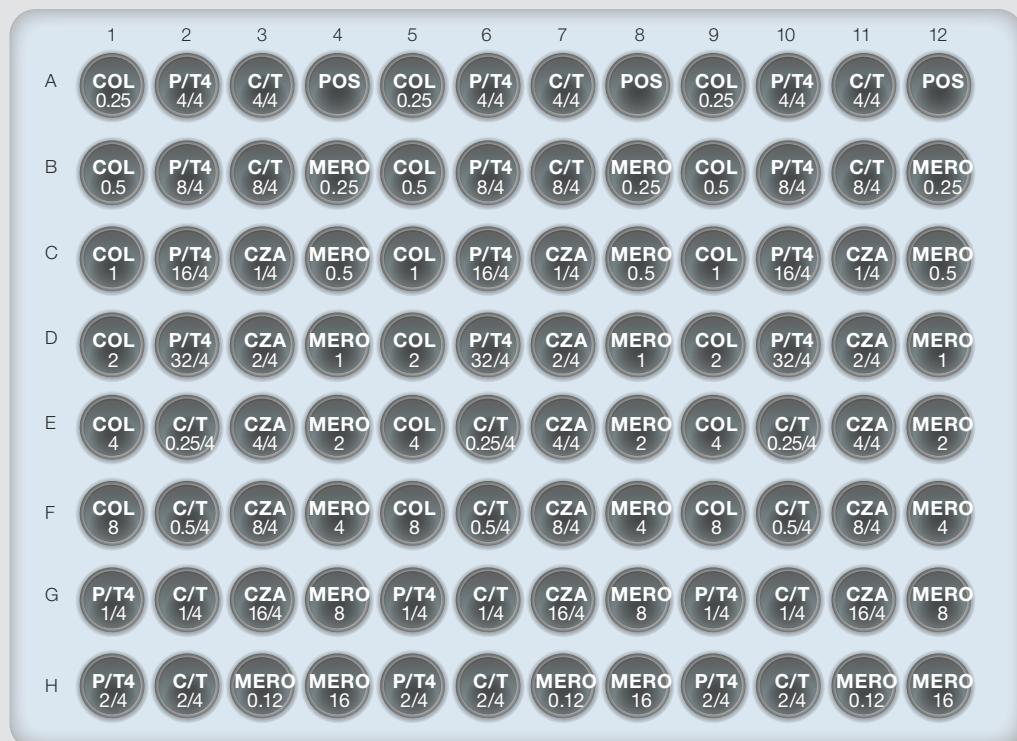
AMI	Amikacin
AUGC	Amoxicillin / Clavulanic acid constant 2
AZT	Aztreonam
FOT	Cefotaxime
TAZ	Ceftazidime
CZA	Ceftazidime / Avibactam
C/T	Ceftolozane / Tazobactam constant 4
CIP	Ciprofloxacin
COL	Colistin
ETP	Ertapenem
GEN	Gentamicin
IMI	Imipenem
MERO	Meropenem
P/T4	Piperacillin / Tazobactam constant 4
POS	Positive control
TGC	Tigecycline
TOB	Tobramycin
SXT	Trimethoprim / Sulfamethoxazole

\*For *Proteus* spp. \*\*For Enterobacteriaceae and Non-Enterobacteriaceae. \*\*\*For aid in detection of resistance mechanisms for Enterobacteriaceae and Non-Enterobacteriaceae.

# Sensititre Gram Negative EURGNOL Plate

with Colistin, Ceftazidime/Avibactam and Ceftolozane/Tazobactam

Intended use	Read method	EUCAST recommended routine QC strains	
Antimicrobial susceptibility plate for testing non-fastidious Gram negative isolates	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4603074	<i>Klebsiella pneumoniae</i> ATCC® 700603™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4601314	<i>Escherichia coli</i> NCTC 13846
<b>Broth type</b>		Additional QC strains used for product release	
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



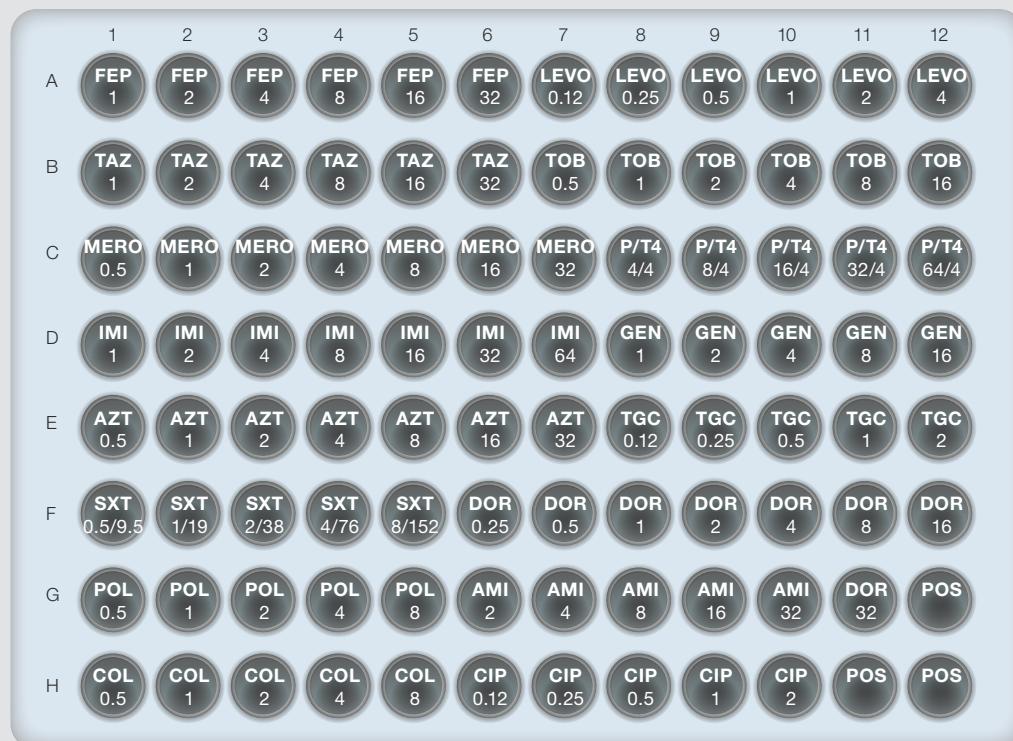
## Antimicrobics

<b>CZA</b>	Ceftazidime / Avibactam
<b>C/T</b>	Ceftolozane / Tazobactam constant 4
<b>COL</b>	Colistin
<b>MERO</b>	Meropenem
<b>P/T4</b>	Piperacillin / Tazobactam constant 4
<b>POS</b>	Positive control

\*For *Proteus* spp. \*\*For Enterobacteriaceae and Non-Enterobacteriaceae. \*\*\*For aid in detection of resistance mechanisms for Enterobacteriaceae and Non-Enterobacteriaceae.

# Sensititre Gram Negative EUX2NF Plate

Intended use	Read method	EUCAST recommended routine QC strains	
Antimicrobial susceptibility plate for testing non-fastidious, Gram negative non-fermenter isolates such as <i>Pseudomonas</i> spp. and <i>Acinetobacter</i> spp.	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4603074	<i>Klebsiella pneumoniae</i> ATCC® 700603™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4601314	<i>Escherichia coli</i> NCTC 13846
Broth type		Additional QC strains used for product release	
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



## Antimicrobics

AMI	Amikacin
AZT	Aztreonam
FEP	Cefepime
TAZ	Ceftazidime
CIP	Ciprofloxacin
COL	Colistin
DOR	Doripenem
GEN	Gentamicin
IMI	Imipenem
LEVO	Levofloxacin
MERO	Meropenem
P/T4	Piperacillin / Tazobactam constant 4
POL	Polymixin B
POS	Positive control
TGC	Tigecycline
TOB	Tobramycin
SXT	Trimethoprim / Sulfa-methoxazole

\*For *Proteus* spp. \*\*For Enterobacteriaceae and Non-Enterobacteriaceae. \*\*\*For aid in detection of resistance mechanisms for Enterobacteriaceae and Non-Enterobacteriaceae.



## Earlier access to the latest antimicrobials could provide alternative and effective treatment options for critically ill patients.

Treating multidrug-resistant infections and monitoring emergent multidrug resistance is more important now than ever. Expand your Gram negative organism susceptibility testing options by accessing the latest antibiotics including **sulbactam/durlobactam\***, **eravacycline**, **imipenem/relebactam** and **meropenem/vaborbactam**.

Confidently perform CLSI or EUCAST (product dependant) compliant susceptibility testing of multi-drug resistant Gram negative isolates on a single plate providing clinicians with gold standard equivalent, accurate results<sup>1</sup> to guide optimal treatment decisions.

Our continued and close collaboration with pharmaceutical companies developing new antimicrobials enables early access on multiple AST devices, including standard and customized formats, providing flexibility to meet your manual and/or automated workflow requirements.



1. International Organization for Standardization (ISO) (2019) *Susceptibility testing of infectious agents and evaluation of performance of antimicrobial susceptibility test devices — Part 1: Broth micro-dilution reference method for testing the in vitro activity of antimicrobial agents against rapidly growing aerobic bacteria involved in infectious diseases*. ISO 20776-1:2019.  
Thermo Fisher Scientific products are distributed globally so uses, applications, and availability of product in each country depend on local regulatory marketing authorization status. \*For research use only. Not for use in diagnostic procedures.

# Sensititre Gram Positive EUSTAPF Plate

## with Ceftaroline and Telavancin

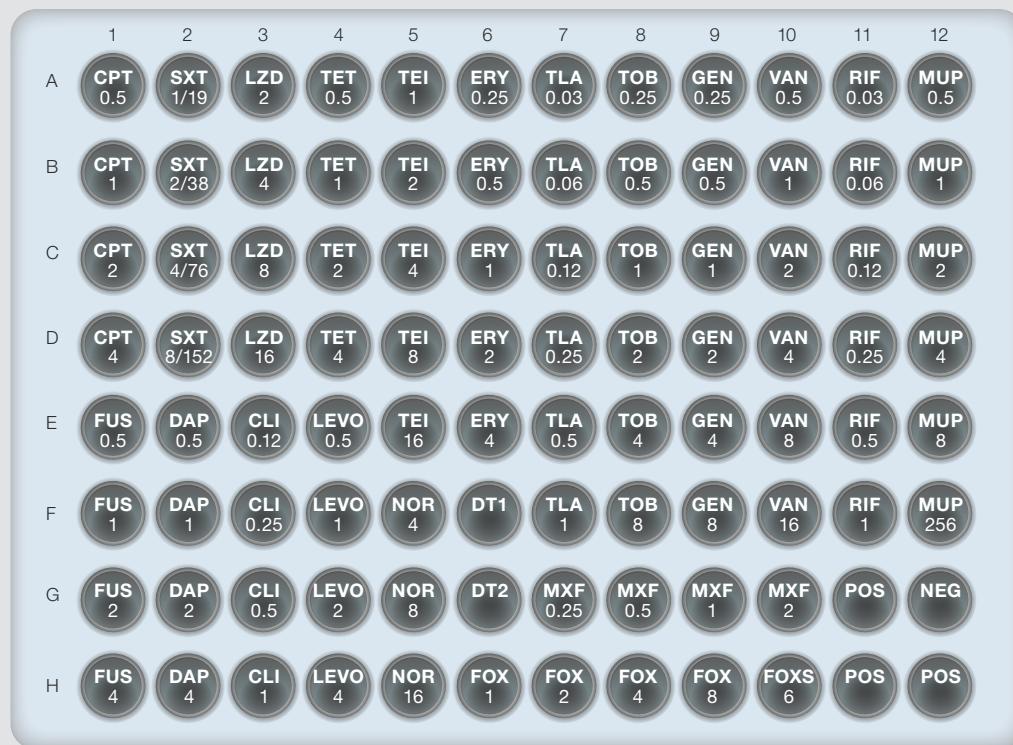
Intended use	Read method	EUCAST recommended routine QC strains	
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Antimicrobial susceptibility plate for testing <i>Staphylococcus</i> species isolates	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
Additional QC strains used in product release testing			
			R4607050 <i>Escherichia coli</i> ATCC® 25922™
			R4607060 <i>Pseudomonas aeruginosa</i> ATCC® 27853™
			R4606512 <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® BAA-976™
			R4606513 <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® BAA-977™
			R4607010 <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 25923™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 10 µL or 30 µL\* of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator or Sensititre ARIS HiQ for 18-24 hours\*\*

Read automatically with ARIS HiQ or OptiRead, read manually with Vizion or Manual Viewbox



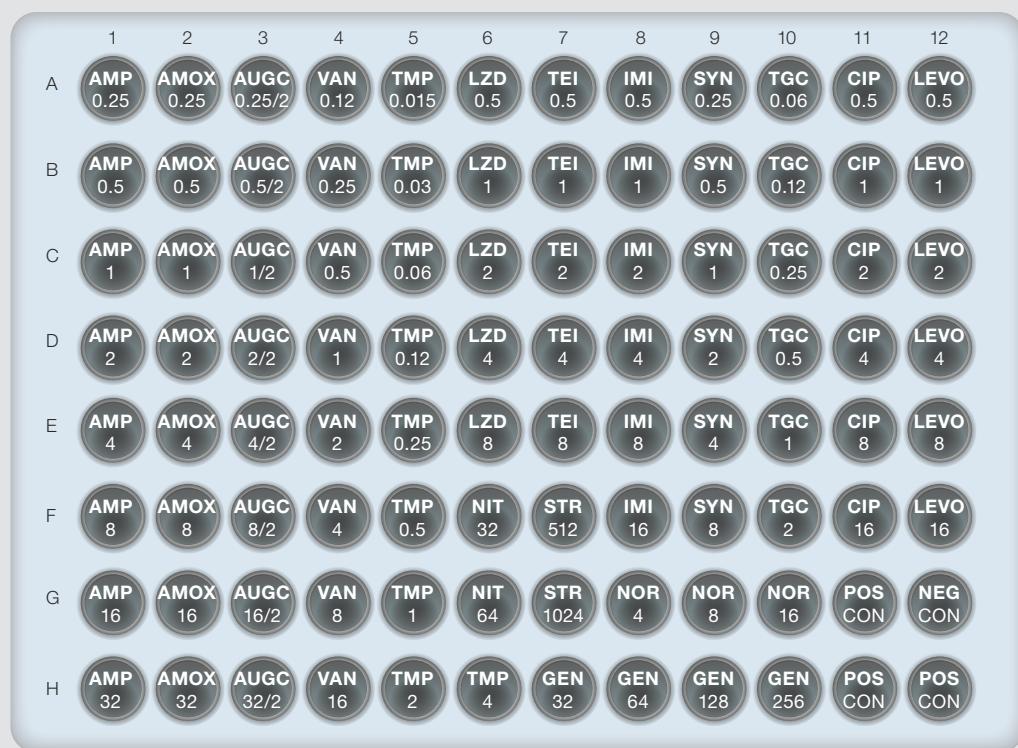
## Antimicrobics

FOX	Cefoxitin
FOXS	Cefoxitin screen
CPT	Ceftaroline
CLI	Clindamycin
DT1	D Test 1
DT2	D Test 2
DAP	Daptomycin
ERY	Erythromycin
FUS	Fusidate
GEN	Gentamicin
LEVO	Levofloxacin
LZD	Linezolid
MXF	Moxifloxacin
MUP	Mupirocin
NEG	Negative control
NOR	Norfloxacin
POS	Positive control
RIF	Rifampin
TEI	Teicoplanin
TLA	Telavancin
TET	Tetracycline
TOB	Tobramycin
SXT	Trimethoprim / Sulfamethoxazole
VAN	Vancomycin

\*To aid in detection of resistance mechanisms for Gram positive organisms. \*\*Incubate for 24 hours to ensure detection of oxacillin-resistant *Staphylococcus* and vancomycin-resistant *Enterococcus* spp.

# Sensititre Gram Positive EUENCF Plate

Intended use	Read method	EUCAST recommended routine QC strains	
Broth type	Inoculum preparation		
Antimicrobial susceptibility plate for testing <i>Enterococcus</i> species isolates	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		Additional QC strains used for product release	
		R4601996	<i>Enterococcus faecalis</i> ATCC® 51299™
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™



## Antimicrobics

AMOX	Amoxicillin
AUGC	Amoxicillin / Clavulanic acid constant 2
AMP	Ampicillin
CIP	Ciprofloxacin
GEN	Gentamicin
IMI	Imipenem
LEVO	Levofloxacin
LZD	Linezolid
NEG	Negative control
NIT	Nitrofurantoin
NOR	Norfloxacin
POS	Positive control
SYN	Quinupristin / Dalfopristin
STR	Streptomycin
TEI	Teicoplanin
TGC	Tigecycline
TMP	Trimethoprim
VAN	Vancomycin

\*To aid in detection of resistance mechanisms for Gram positive organisms. \*\*Incubate for 24 hours to ensure detection vancomycin-resistant *Enterococcus* spp.

# Sensititre Gram Positive FR2STENT Plate

## with Ceftobiprole, Dalbavancin and Delafloxacin

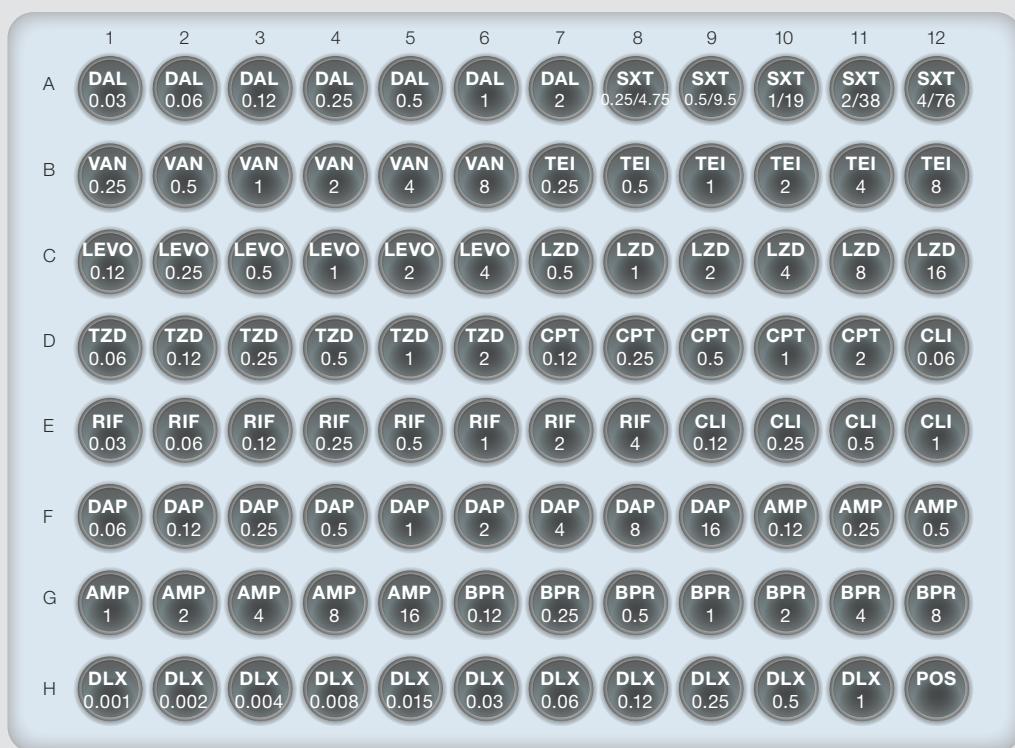
Intended use	Read method	EUCAST recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Enterococcus</i> species isolates	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™		
R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™		
R4601971	<i>Escherichia coli</i> ATCC® 35218™		
Broth type	Inoculum preparation	Additional QC strains used for product release	
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4601996	<i>Enterococcus faecalis</i> ATCC® 51299™
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 10 µL or 30 µL\* of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator or Sensititre ARIS HiQ for 18-24 hours\*\*

Read automatically with ARIS HiQ or OptiRead, read manually with Vizion or Manual Viewbox



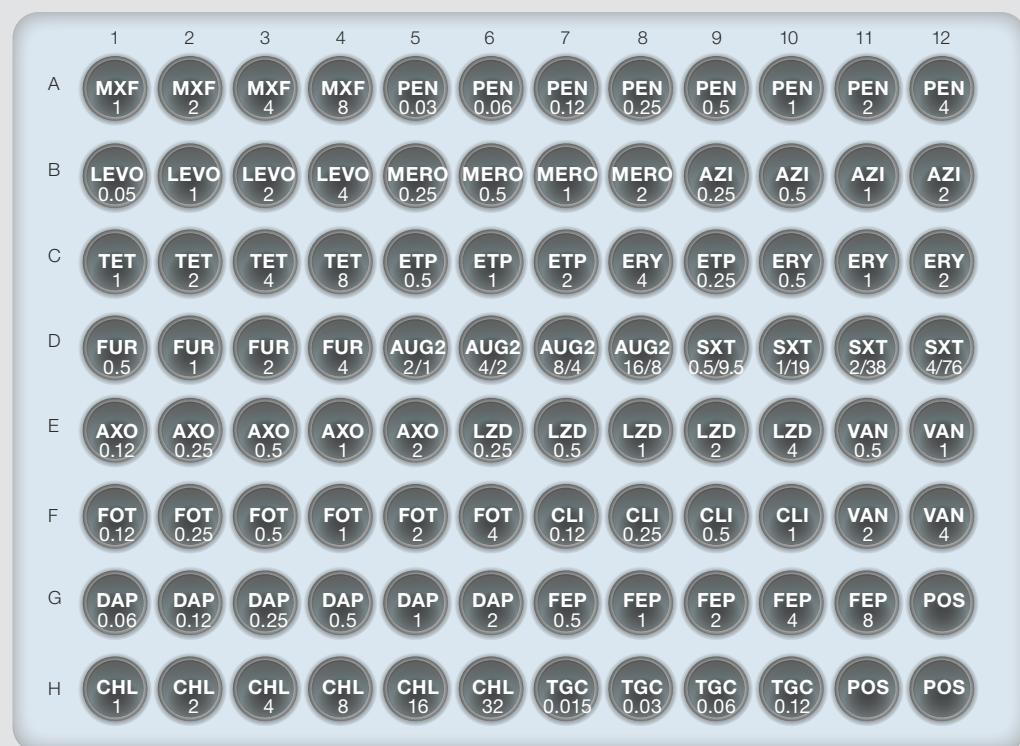
### Antimicrobics

AMP	Ampicillin
CPT	Ceftaroline
BPR	Ceftobiprole
CLI	Clindamycin
DAL	Dalbavancin
DAP	Daptomycin
DLX	Delafloxacin
LEVO	Levofloxacin
LZD	Linezolid
POS	Positive control
RIF	Rifampin
TZD	Tedizolid
TEI	Teicoplanin
SXT	Trimethoprim / Sulfamethoxazole
VAN	Vancomycin

\*To aid in detection of resistance mechanisms for Gram positive organisms. \*\*Incubate for 24 hours to ensure detection vancomycin-resistant *Enterococcus* spp.

# Sensititre Streptococcus species STP6F Plate

Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Streptococcus</i> species	Autoread or manual Sensititre ARIS HiQ (V3090) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
		R4609015	<i>Streptococcus pneumoniae</i> ATCC® 49619
Additional QC strains used in product release testing			
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™

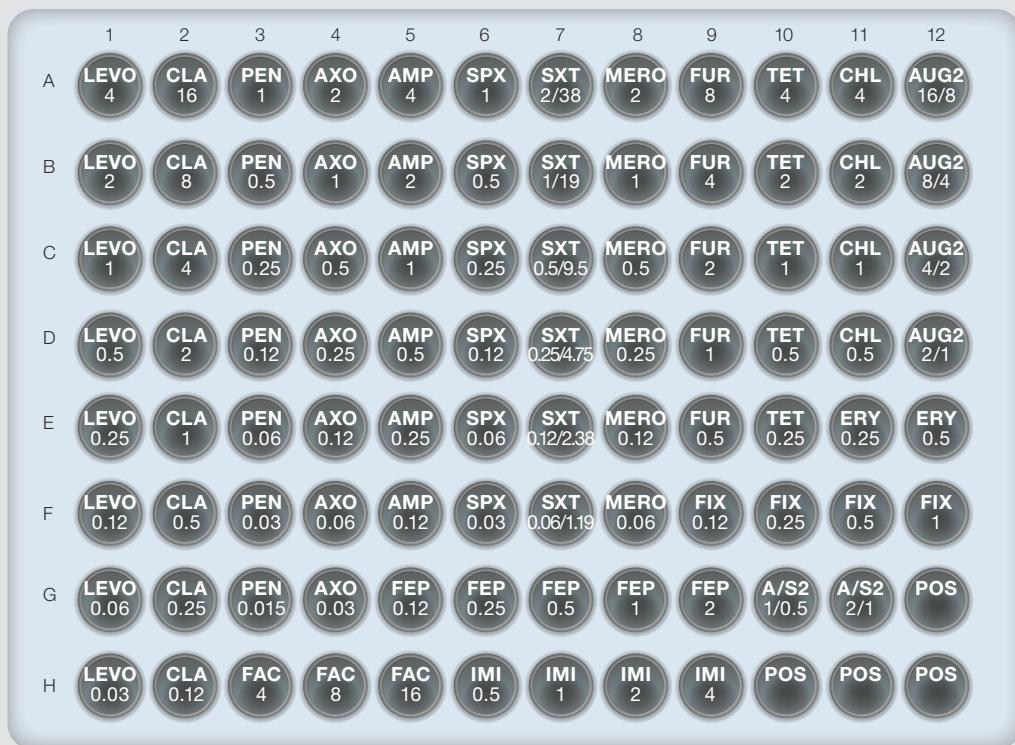


## Antimicrobics

AUG2	Amoxicillin / Clavulanic acid 2:1 ratio
AZI	Azithromycin
FEP	Cefepime
FOT	Cefotaxime
AXO	Ceftriaxone
FUR	Cefuroxime
CHL	Chloramphenicol
CLI	Clindamycin
DAP	Daptomycin
ETP	Ertapenem
ERY	Erythromycin
LEVO	Levofloxacin
LAZD	Linezolid
MERO	Meropenem
MXF	Moxifloxacin
PEN	Penicillin
POS	Positive control
TET	Tetracycline
TGC	Tigecycline
SXT	Trimethoprim / Sulphamethoxazole
VAN	Vancomycin

# Sensititre Haemophilus and Streptococcus pneumoniae HPB1 Plate

Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Streptococcus pneumoniae</i> and <i>Haemophilus influenzae</i> isolates	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
		R4603830	<i>Haemophilus influenzae</i> ATCC® 49247™
		R4603806	<i>Haemophilus influenzae</i> ATCC® 49766™
		R4609015	<i>Streptococcus pneumoniae</i> ATCC® 49619



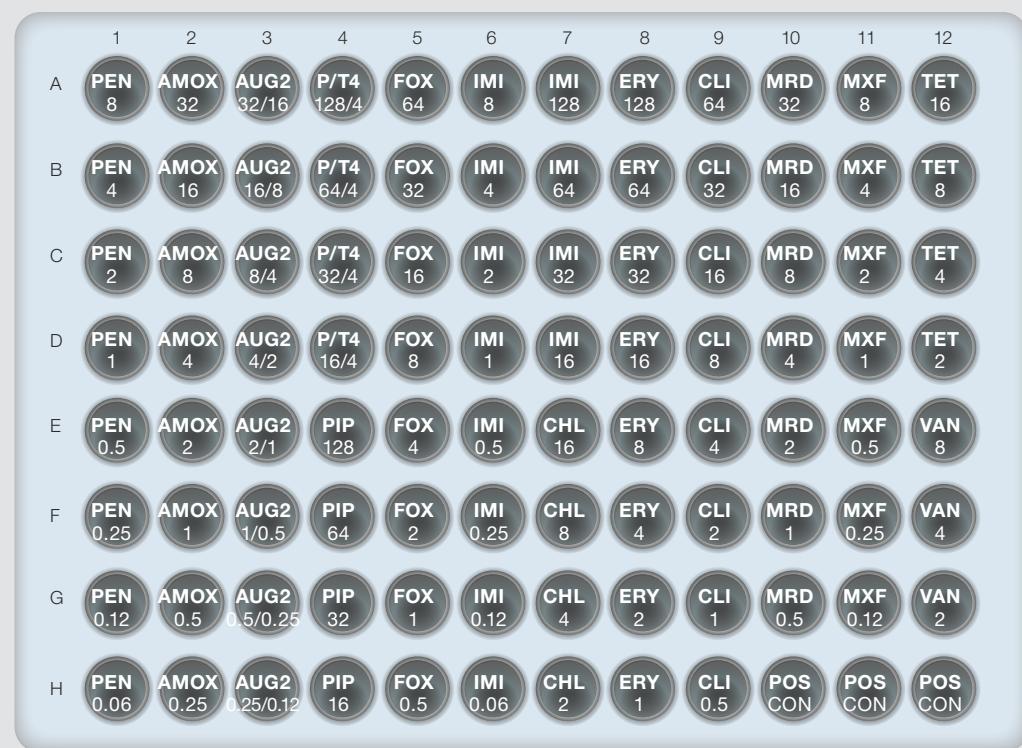
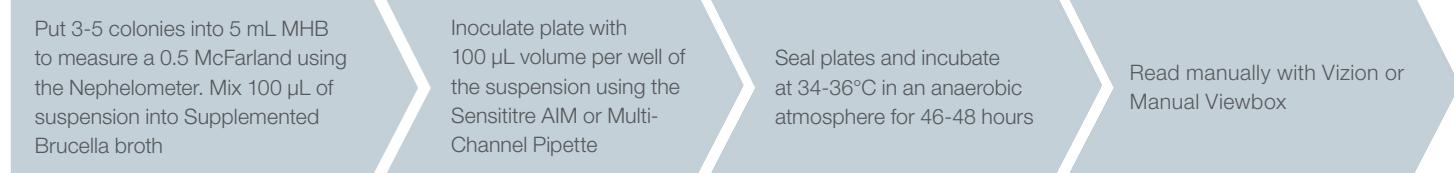
AUG2	Amoxicillin/Clavulanic Acid 2:1 ratio
AMP	Ampicillin
A/S2	Ampicillin/Sulbactam 2:1 ratio
FAC	Cefaclor
FEP	Cefepime
FIX	Cefixime
AXO	Ceftriaxone
FUR	Cefuroxime
CHL	Chloramphenicol
CLA	Clarithromycin
ERY	Erythromycin
IMI	Imipenem
LEVO	Levofloxacin
MERO	Meropenem
PEN	Penicillin
POS	Positive control
SPX	Sparfloxacin
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole

\*For *Haemophilus*. \*\*For *S. pneumoniae/streptococcus*.

# Sensititre Anaerobe ANAERO3 Plate

for *B. fragilis* group, with Amoxicillin, Erythromycin, Moxifloxacin and Vancomycin

Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing anaerobic organisms <i>Bacteroides fragilis</i> group	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Sensititre Supplemented Brucella Broth for Anaerobes (T3450)	0.5 McFarland Standard (E1041) Sensititre™ Cation Adjusted Mueller-Hinton Broth with TES (T3462-05)	R4601250 R4601260	<i>Bacteroides fragilis</i> ATCC® 25285™ <i>Bacteroides thetaiotaomicron</i> ATCC® 29741™



## Antimicrobics

AMOX	Amoxicillin
AUG2	Amoxicillin/Clavulanic acid 2:1 ratio
FOX	Cefoxitin
CHL	Chloramphenicol
CLI	Clindamycin
ERY	Erythromycin
IMI	Imipenem
MRD	Metronidazole
MXF	Moxifloxacin
PEN	Penicillin
PIP	Piperacillin
P/T4	Piperacillin / Tazobactam constant 4
POS	Positive control
TET	Tetracycline



## Sensititre YeastOne antifungal plates provide accurate, true MIC results and an expanded range of antifungals, including micafungin.

Eliminate the time required to manage multiple protocols and increase productivity and efficiency by consolidating your antifungal susceptibility testing onto a single format with Thermo Scientific™ Sensititre™ YeastOne™ plates.

Our YeastOne plate formats offer expanded ranges of antifungals, allowing laboratories to report and track echinocandin susceptibility and resistance against *Candida* spp. Additional plates in the YeastOne portfolio include a wide range of antifungals, allowing you to perform your fungal testing on one platform with clear, easy-to-read end point determination.

All YeastOne plates include:

- Colorimetric Thermo Scientific™ alamarBlue™ agent provides reliable, easy and consistent endpoint determination with visual read options
- Room-temperature storage eliminates inventory control concerns
- Individual packaging allows laboratory to test one plate at a time with no waste
- Inclusive on-scale QC ranges provide immediate quality assurance of testing methodology
- 24-hour incubation time enables timely results

# Sensititre YeastOne YO10 Plate

## with Anidulafungin and Micafungin

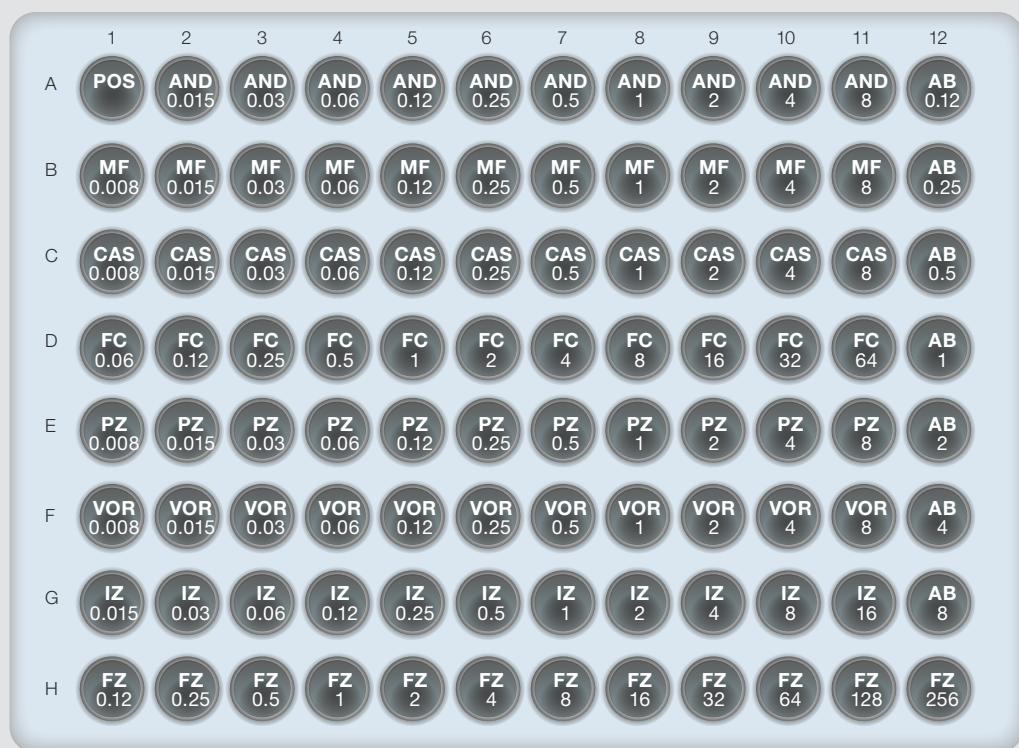
Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Candida</i> species	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
		R4601520	<i>Issatchenkia orientalis</i> ATCC® 6258™
		R4601518	<i>Candida parapsilosis</i> ATCC® 22019™
Broth type	<b>Inoculum preparation</b>		
Sensititre YeastOne Broth (Y3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)		

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 20 µL of suspension into Sensititre YeastOne Broth

Inoculate plate with 100 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 35°C in a non-CO<sub>2</sub> incubator for 24-25 hours

Read manually with Vizion or Manual Viewbox



### Antimicrobics

FC	5-Flucytosine
AB	Amphotericin B
AND	Anidulafungin
CAS	Caspofungin
FZ	Fluconazole
IZ	Itraconazole
MF	Micafungin
PZ	Posaconazole
POS	Positive control
VOR	Voriconazole

# Sensititre YeastOne ITAMYUCC Plate

## with Isavuconazole

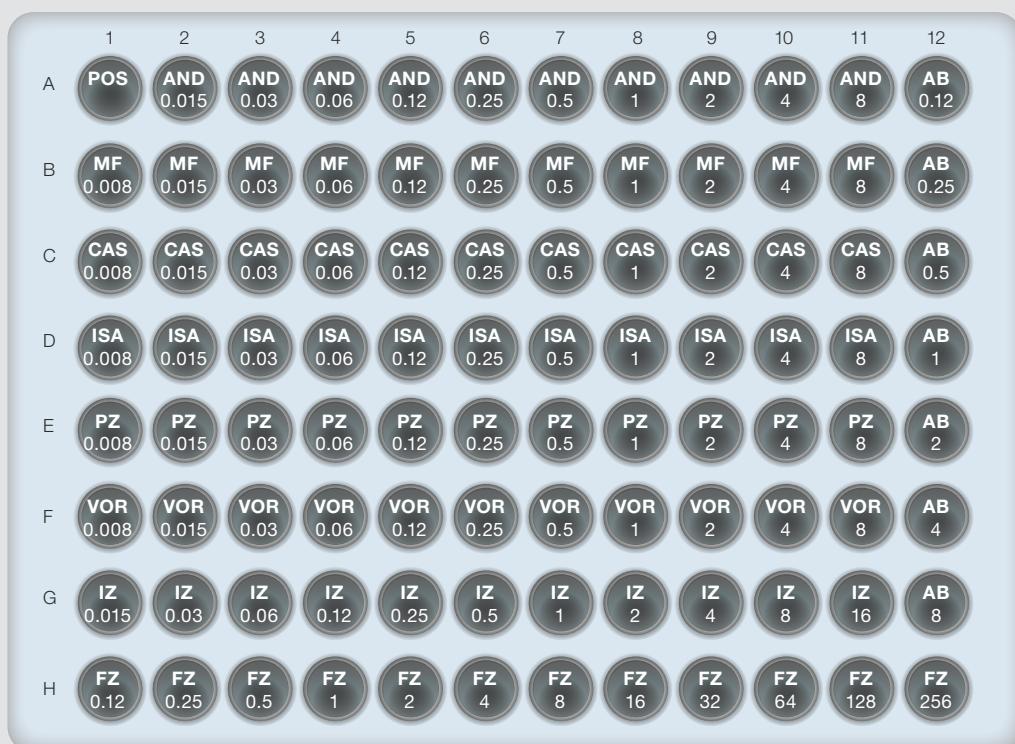
Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Candida</i> species	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Sensititre YeastOne Broth (Y3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4601520 R4601518	<i>Issatchenkia orientalis</i> ATCC® 6258™ <i>Candida parapsilosis</i> ATCC® 22019™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 20 µL of suspension into Sensititre YeastOne Broth

Inoculate plate with 100 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 35°C in a non-CO<sub>2</sub> incubator for 24-25 hours

Read manually with Vizion or Manual Viewbox

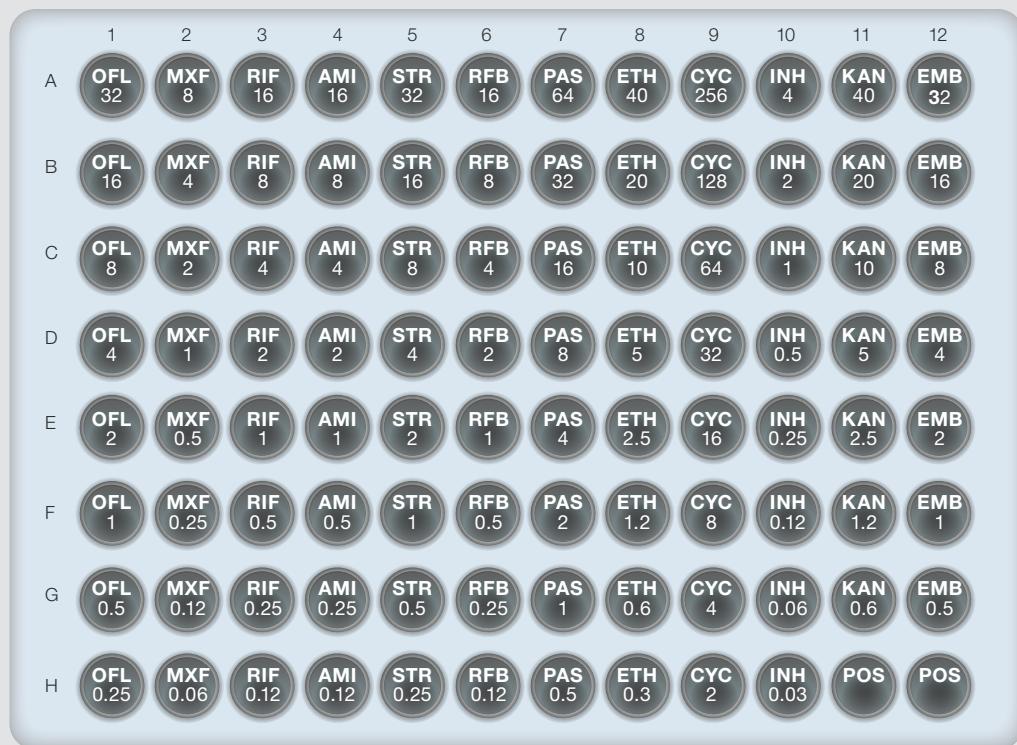


### Antimicrobics

AB	Amphotericin B
AND	Anidulafungin
CAS	Caspofungin
FZ	Fluconazole
ISA	Isavuconazole
IZ	Itraconazole
MF	Micafungin
PZ	Posaconazole
POS	Positive control
VOR	Voriconazole

# Sensititre Mycobacterium Tuberculosis MYCOTBI Plate

Intended use	Read method	CLSI recommended routine QC strains	
Determination of MICs to first and second-line anti-tuberculosis drugs for <i>Mycobacterium tuberculosis</i> isolates	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Sensititre Middlebrook 7H9 with OADC (T3441)	0.5 McFarland Standard (E1041) Sensititre Saline Tween with Glass Beads (T3490)	N/A	<i>Mycobacterium tuberculosis</i> ATCC® 27294™



## Antimicrobics

AMI	Amikacin
CYC	Cycloserine
EMB	Ethambutol
ETH	Ethionamide
INH	Isoniazid
KAN	Kanamycin
MXF	Moxifloxacin
OFL	Ofloxacin
PAS	Para-aminosalicylic acid
POS	Positive control
RFB	Rifabutin
RIF	Rifampin
STR	Streptomycin

# Sensititre Rapid Growing Mycobacteria RAPMYCOI Plate

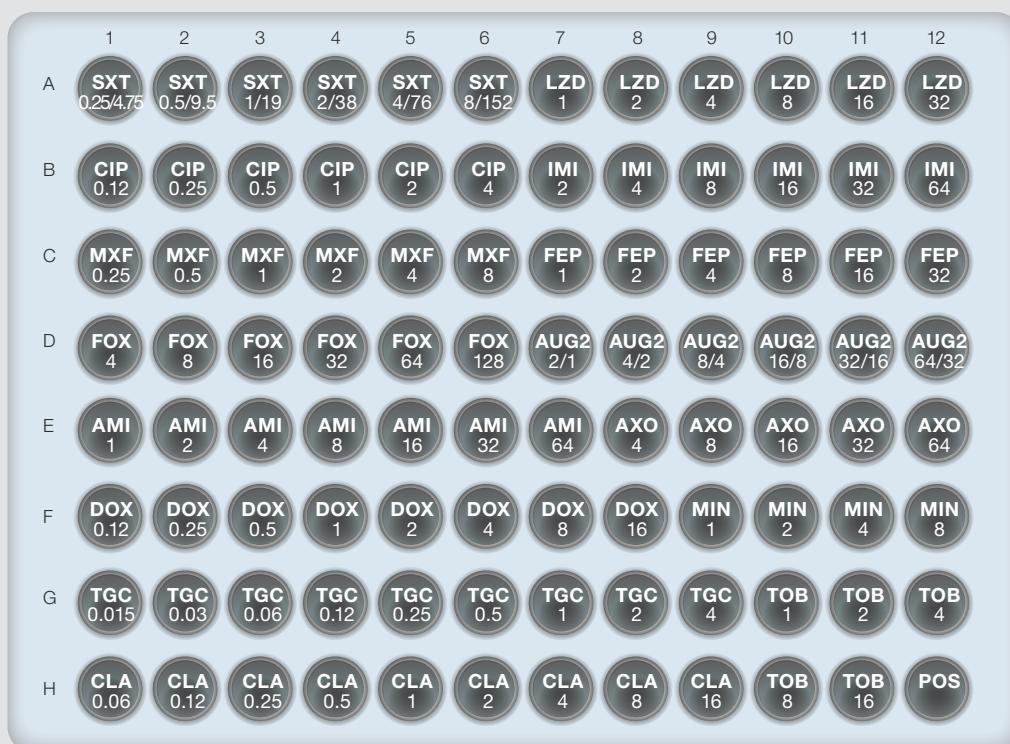
Intended use	Read method	CLSI recommended routine QC strains	
Susceptibility testing of rapidly growing mycobacteria, <i>Nocardia</i> spp., and other aerobic actinomycetes	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
		N/A	<i>Mycobacterium peregrinum</i> ATCC® 700686
		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
<b>Broth type</b>		Additional QC strains used in product release testing	
Sensititre MHB with TES (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339) Demineralized Water with Glass Beads (T3492)	R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		N/A	<i>Mycobacterium smegmatis</i> ATCC® 19420™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer. Mix 50 µL of suspension into Sensititre MHB with TES

Inoculate plate with 100 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 30°C in a non-CO<sub>2</sub> air incubator for 72 hours\*

Manually read with Sensititre Vizion or Sensititre Manual Viewbox



## Antimicrobics

AMI	Amikacin
AUG2	Amoxicillin / Clavulanic acid 2:1 ratio
FEP	Cefepime
FOX	Cefoxitin
AXO	Ceftriaxone
CIP	Ciprofloxacin
CLA	Clarithromycin
DOX	Doxycycline
IMI	Imipenem
LZD	Linezolid
MIN	Minocycline
MXF	Moxifloxacin
POS	Positive control
TGC	Tigecycline
TOB	Tobramycin
SXT	Trimethoprim / Sulfamethoxazole

# Sensititre Slow Growing Mycobacteria SLOMYCOI Plate

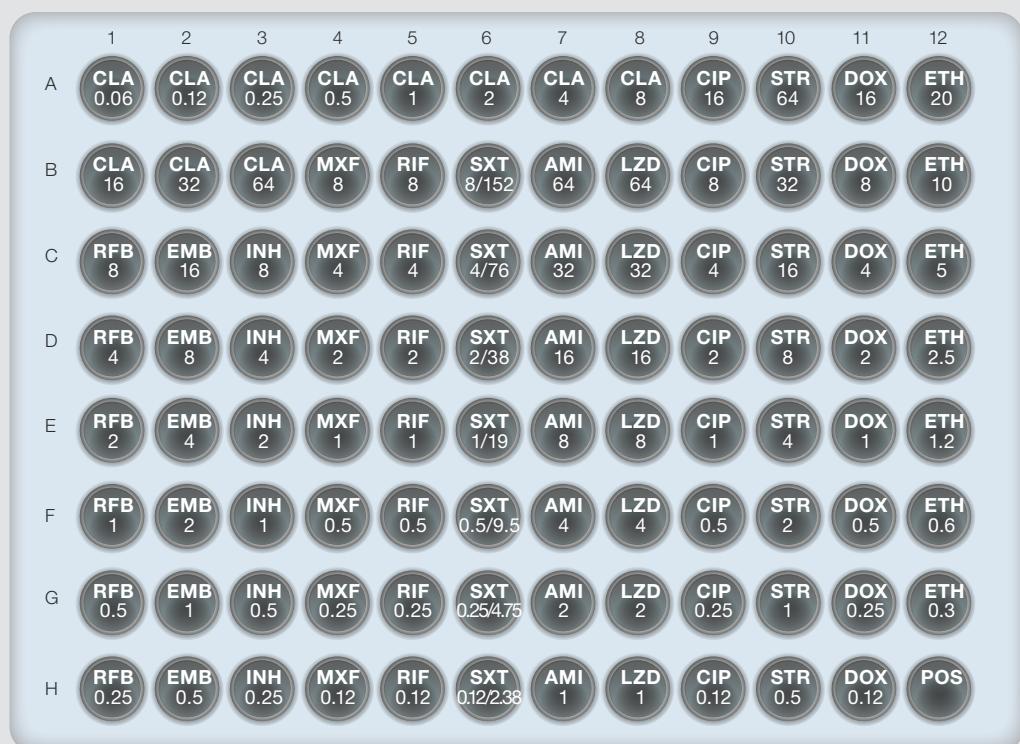
Intended use	Read method	CLSI recommended routine QC strains	
Susceptibility testing of slowly growing non-tuberculosis mycobacteria (NTM), i.e. <i>Mycobacterium avium</i> complex, <i>Mycobacterium kansasii</i> and <i>Mycobacterium marinum</i> . Please refer to CLSI for details of testing <i>M. marinum</i>	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Mueller-Hinton Broth with OADC (T8006)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339) Demineralized Water with Glass Beads (T3492)	R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
Additional QC strains used in product release testing		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		N/A	<i>Mycobacterium smegmatis</i> ATCC 19420
		N/A	<i>Mycobacterium peregrinum</i> ATCC 700686
		N/A	<i>Mycobacterium avium</i> ATCC 700898

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 50 µL of suspension into Mueller Hinton broth with OADC (T8006)

Inoculate plate with 100 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 35°C in a non-CO<sub>2</sub> air incubator for 7 to 14 days

Read manually with Vizion or Manual Viewbox



## Antimicrobics

AMI	Amikacin
CIP	Ciprofloxacin
CLA	Clarithromycin
DOX	Doxycycline
EMB	Ethambutol
ETH	Ethionamide
INH	Isoniazid
LZD	Linezolid
MXF	Moxifloxacin
POS	Positive control
RFB	Rifabutin
RIF	Rifampin
STR	Streptomycin
SXT	Trimethoprim / Sulfamethoxazole



Offering true MIC results for over 40+ veterinary-specific antimicrobials and a broad portfolio of host animal-specific AST plates, the Sensititre System bolsters your ability to improve animal outcomes.

Emergent diseases and evolving multidrug resistance demand earlier intervention with the latest antimicrobials. To effectively treat animal and zoonotic infections, you need a microbiology offering that delivers relevant, more accurate results every time. For standard and custom solutions formulated specifically for veterinary microbiology laboratories, choose the Sensititre AST System.

Host animal-specific AST formats ensure compliance with veterinary CLSI recommendations. New antimicrobials valnemulin and aminosidin are now available for custom solutions.



## Vet standard plate formats

INSTRUMENTS	COMPANION		BOVINE/PORCINE	AVIAN	EQUINE	URINE	BOVINE (mastitis)	TOPICAL		
	GRAM NEGATIVE	GRAM POSITIVE								
	GRAM NEGATIVE/POSITIVE									
FLUORESCENT PLATES	AUTOREAD, SEMI-AUTOMATED AND MANUAL READ (ARIS HiQ, OptiRead, Vizion, Manual Viewbox)	COMPGN1F	COMPGP1F	BOP06F	BOP07F	AVIAN1F	EQUIN2F	CWV1BURF	CWV1AMAF	JOEYE2
NON-FLUORESCENT PLATES	SEMI-AUTOMATED AND MANUAL READ (Vizion, Manual Viewbox)									●

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# Sensititre Companion Animal Gram Negative COMPGN1F Plate with Pradofloxacin

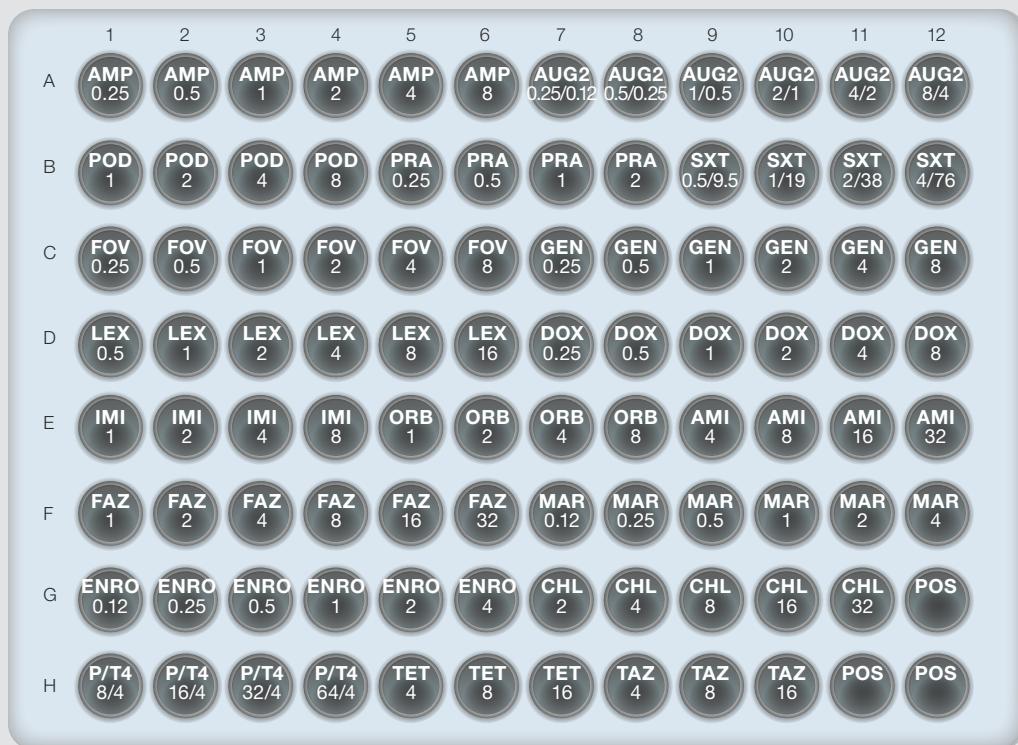
Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing non-fastidious Gram negative isolates of veterinary origin	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
Broth type	Inoculum preparation	QC strains used for product release	
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 1 µL\* or 10 µL of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator or Sensititre ARIS HiQ for 18-24 hours

Read automatically with ARIS HiQ or OptiRead; read manually with Vizion or Manual Viewbox



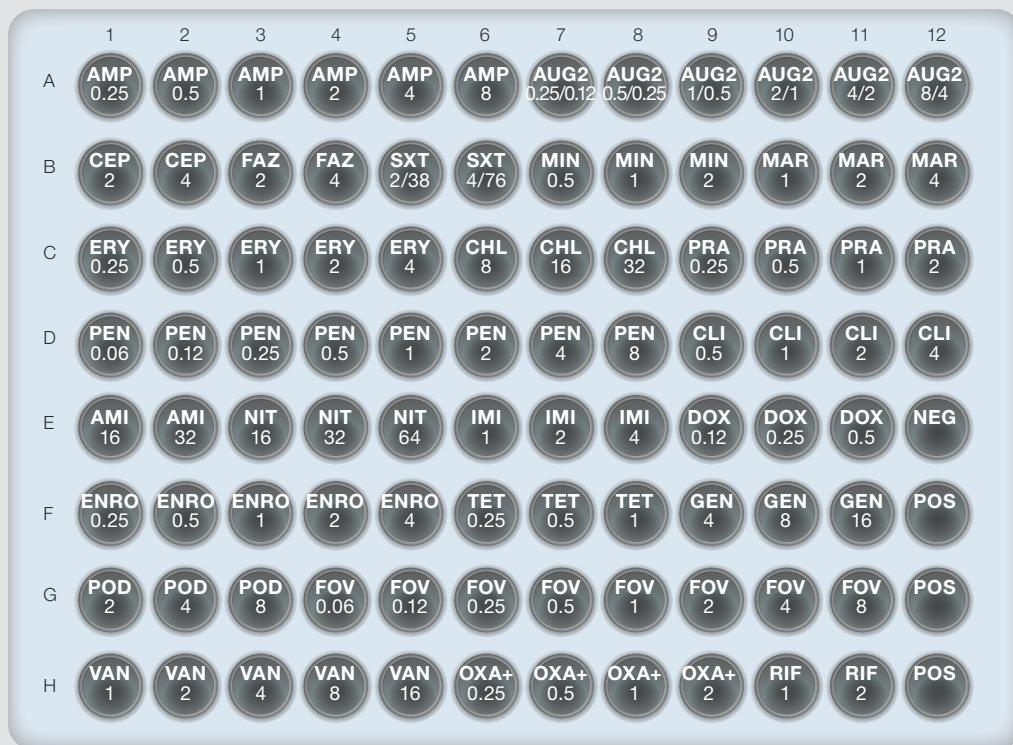
## Antimicrobics

AMI	Amikacin
AUG2	Amoxicillin/Clavulanic acid 2:1 ratio
AMP	Ampicillin
FAZ	Cefazolin
POD	Cefopodoxime
FOV	Cefovecin
TAZ	Ceftazidime
LEX	Cephalexin
CHL	Chloramphenicol
DOX	Doxycycline
ENRO	Enrofloxacin
GEN	Gentamicin
IMI	Imipenem
MAR	Marbofloxacin
ORB	Orbifloxacin
P/T4	Piperacillin / Tazobactam content 4
POS	Positive control
PRA	Pradofloxacin
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole

\*For Proteus spp.

# Sensititre Companion Animal Gram Positive COMPGP1F Plate with Pradofloxacin

Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing non-fastidious Gram positive isolates of veterinary origin	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code      Organism description	
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607030 <i>Enterococcus faecalis</i> ATCC® 29212™	
		R4607011 <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™	
		Additional QC strains used for product release	
		R4607050 <i>Escherichia coli</i> ATCC® 25922™	
		R4601971 <i>Escherichia coli</i> ATCC® 35218™	
		R4607060 <i>Pseudomonas aeruginosa</i> ATCC® 27853™	

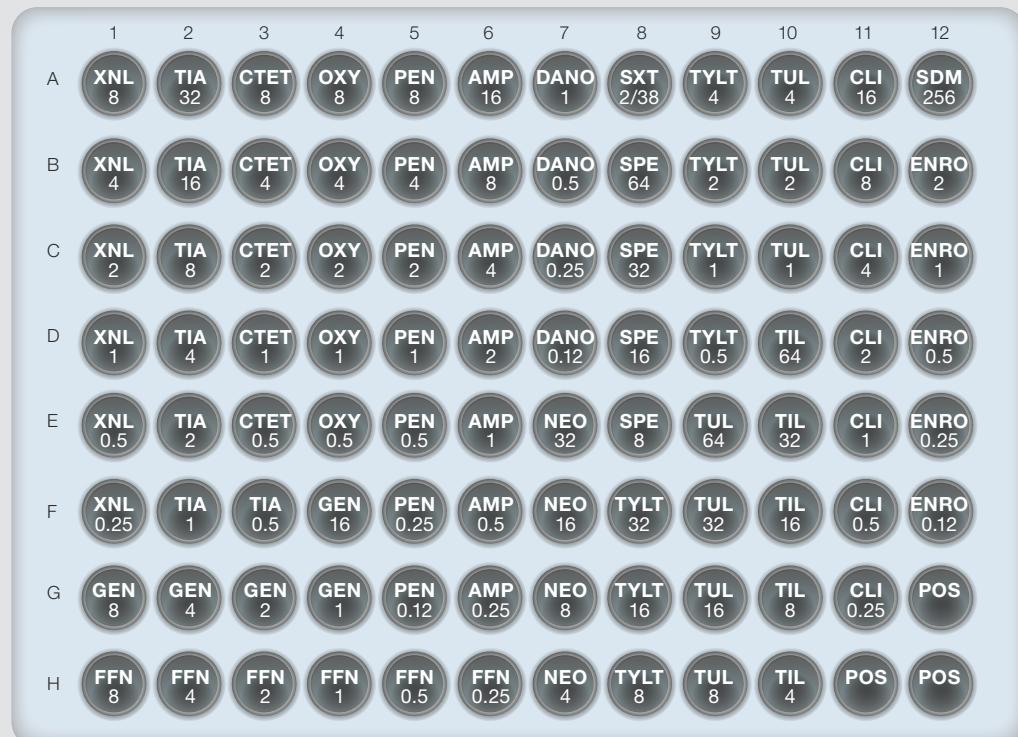


AMI	Amikacin
AUG2	Amoxicillin/Clavulanic acid 2:1 ratio
AMP	Ampicillin
FAZ	Cefazolin
POD	Cefopodoxime
FOV	Cefovecin
CEP	Cephalothin
CHL	Chloramphenicol
CLI	Clindamycin
DOX	Doxycycline
ENRO	Enrofloxacin
ERY	Erythromycin
GEN	Gentamicin
IMI	Imipenem
MAR	Marbofloxacin
MIN	Minocycline
NEG	Negative control
NIT	Nitrofurantoin
OXA+	Oxacillin + 2% NaCl
PEN	Penicillin
POS	Positive control
PRA	Pradofloxacin
RIF	Rifampin
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole
VAN	Vancomycin

\*Ensure detection of hetero-resistant isolates among *Staphylococcus* and *Enterococcus* spp. \*\*Incubate for 24 hours to ensure detection of oxacillin-resistant *Staphylococcus* and vancomycin-resistant *Enterococcus* spp.

# Sensititre Vet Bovine/Swine BPO06F Plate

Intended use	Read method	CLSI recommended routine QC strains	
Broth type	Inoculum preparation		
Antimicrobial susceptibility plate for testing non-fastidious Gram positive and Gram negative isolates of veterinary origin	Autoread or manual Sensititre ARIS HiQ (V3090) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
Additional QC strains used for product release			
		R4609015	<i>Streptococcus pneumoniae</i> ATCC® 49619
		N/A	<i>Histophilus somni</i> ATCC 700025
		N/A	<i>Actinobacillus pleuropneumoniae</i> ATCC 27090



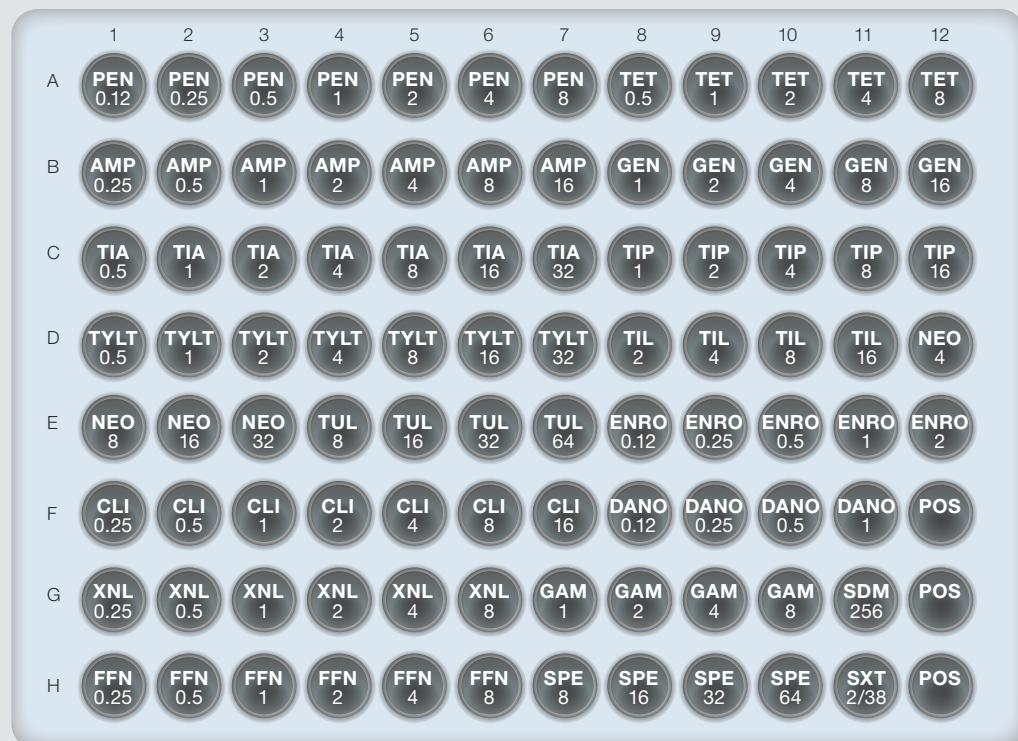
## Antimicrobics

AMP	Ampicillin
XNL	Ceftiofur
CTET	Chlortetracycline
CLI	Clindamycin
DANO	Danofloxacin
ENRO	Enrofloxacin
FFN	Florfenicol
GEN	Gentamicin
NEO	Neomycin
OXY	Oxytetracycline
PEN	Penicillin
POS	Positive control
SPE	Spectinomycin
SDM	Sulphadimethoxine
TIA	Tiamulin
TIL	Tilmicosin
SXT	Trimethoprim / Sulfamethoxazole
TUL	Tulathromycin
TYLT	Tylosin tartrate

\*For *Proteus* spp. \*\*Ensure detection of hetero-resistant isolates among *Staphylococcus* and *Enterococcus* spp. \*\*\*Incubate for 24 hours to ensure detection of oxacillin-resistant *Staphylococcus* and vancomycin-resistant *Enterococcus* spp. †For *Mannheimia hemolytica*, *Pasteurella multocida*, *Bordetella bronchiseptica*, *Streptococcus pneumoniae*, *Histophilus somni*, and *Actinobacillus pleuropneumoniae* isolates, contact your local Thermo Fisher Microbiology representative for protocol specifications.

# Sensititre Vet Bovine BOPO7F Plate

Intended use	Read method	CLSI recommended routine QC strains	
Broth type	Inoculum preparation		
Antimicrobial susceptibility plate for testing non-fastidious Gram positive and Gram negative isolates of veterinary origin <sup>‡</sup>	Autoread or manual Sensititre ARIS HiQ (V3090) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
Additional QC strains used for product release			
		R4609015	<i>Streptococcus pneumoniae</i> ATCC® 49619
		N/A	<i>Histophilus somni</i> ATCC 700025
		N/A	<i>Actinobacillus pleuropneumoniae</i> ATCC 27090



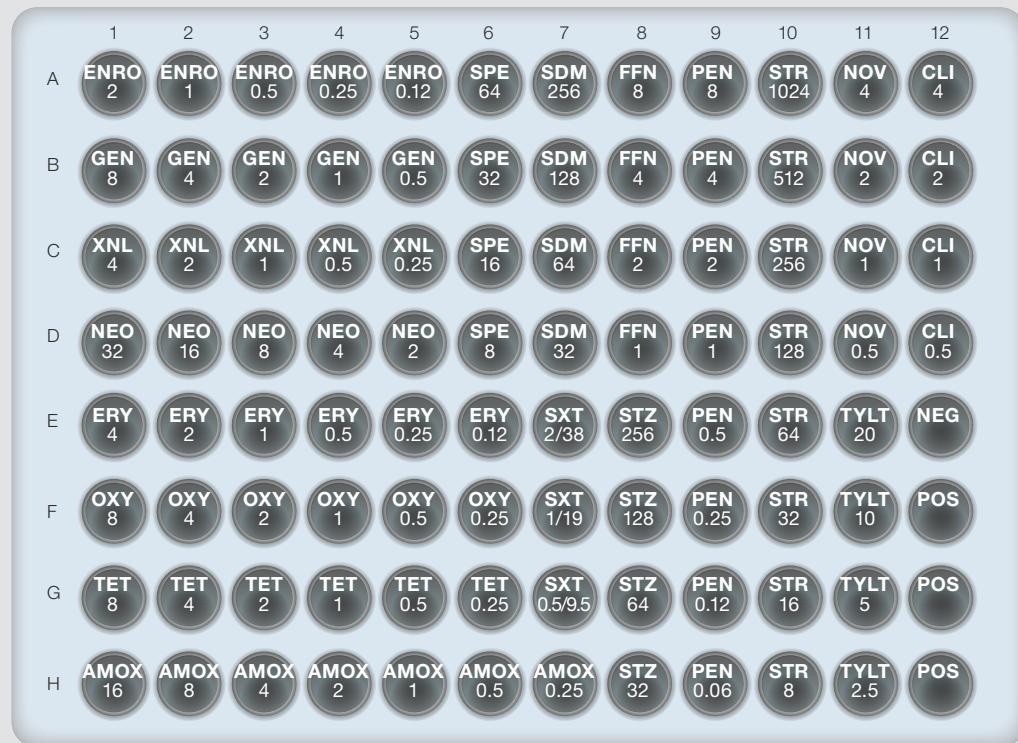
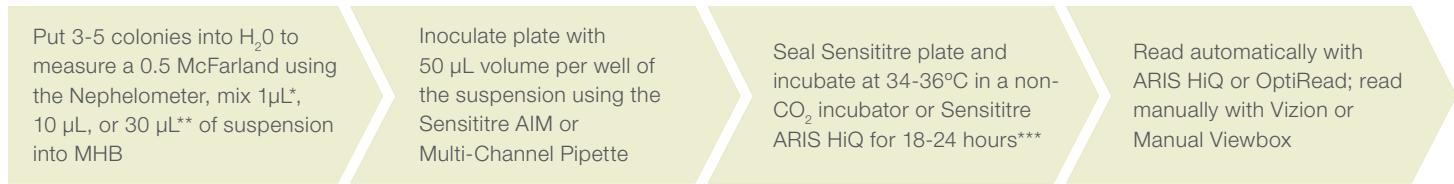
## Antimicrobics

AMP	Ampicillin
XNL	Ceftiofur
CLI	Clindamycin
DANO	Danofloxacin
ENRO	Enrofloxacin
FFN	Florfenicol
GAM	Gamithromycin
GEN	Gentamicin
NEO	Neomycin
PEN	Penicillin
POS	Positive control
SPE	Spectinomycin
SDM	Sulphadimethoxine
TET	Tetracycline
TIA	Tiamulin
TIP	Tildipirosin
TIL	Tilmicosin
SXT	Trimethoprim / Sulfamethoxazole
TUL	Tulathromycin
TYLT	Tylosin tartrate

\*For *Proteus* spp. \*\*Ensure detection of hetero-resistant isolates among *Staphylococcus* and *Enterococcus* spp. \*\*\*Incubate for 24 hours to ensure detection of oxacillin-resistant *Staphylococcus* and vancomycin-resistant *Enterococcus* spp. <sup>‡</sup>For *Manheimia hemolytica*, *Pasteurella multocida*, *Bordetella bronchiseptica*, *Streptococcus pneumoniae*, *Histophilus somni*, and *Actinobacillus pleuropneumoniae* isolates, contact your local Thermo Fisher Microbiology representative for protocol specifications.

# Sensititre Vet Avian AVIAN1F Plate

Intended use	Read method	CLSI recommended routine QC strains	
Antimicrobial susceptibility plate for testing non-fastidious Gram positive and Gram negative isolates of veterinary origin	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



## Antimicrobics

AMOX	Amoxicillin
XNL	Ceftiofur
CLI	Clindamycin
ENRO	Enrofloxacin
ERY	Erythromycin
FFN	Florfenicol
GEN	Gentamicin
NEG	Negative control
NEO	Neomycin
NOV	Novobiocin
OXY	Oxytetracycline
PEN	Penicillin
POS	Positive control
SPE	Spectinomycin
STR	Streptomycin
SDM	Sulphadimethoxine
STZ	Sulphathiazole
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole
TYLT	Tylosin tartrate

\*For *Proteus* spp. \*\*For Enterobacteriaceae and Non-Enterobacteriaceae. \*\*\*For aid in detection of resistance mechanisms for Enterobacteriaceae and Non-Enterobacteriaceae.

# Sensititre Equine EQUIN2F AST Plate

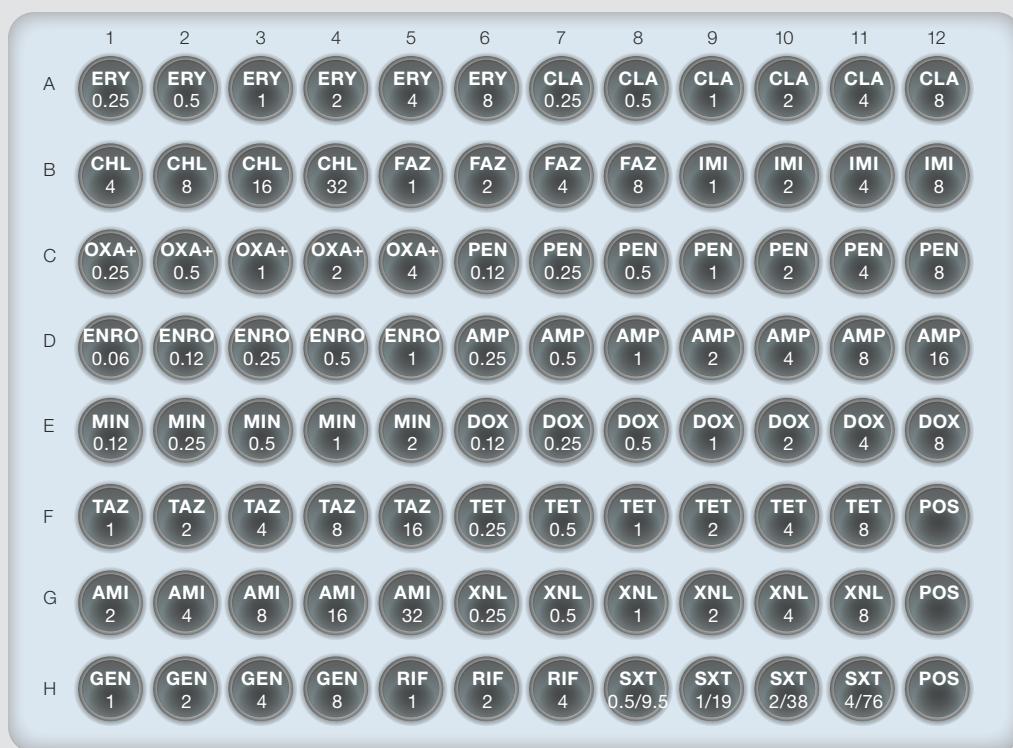
Intended use	Read method	CLSI recommended routine QC strains	
Broth type	Inoculum preparation		
Antimicrobial susceptibility testing of non-fastidious Gram positive and Gram negative isolates of veterinary origin	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 1 µL\*, 10 µL, or 30 µL\*\* of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator or Sensititre ARIS HiQ for 18-24 hours\*\*\*

Read automatically with ARIS HiQ or OptiRead; read manually with Vizion or Manual Viewbox



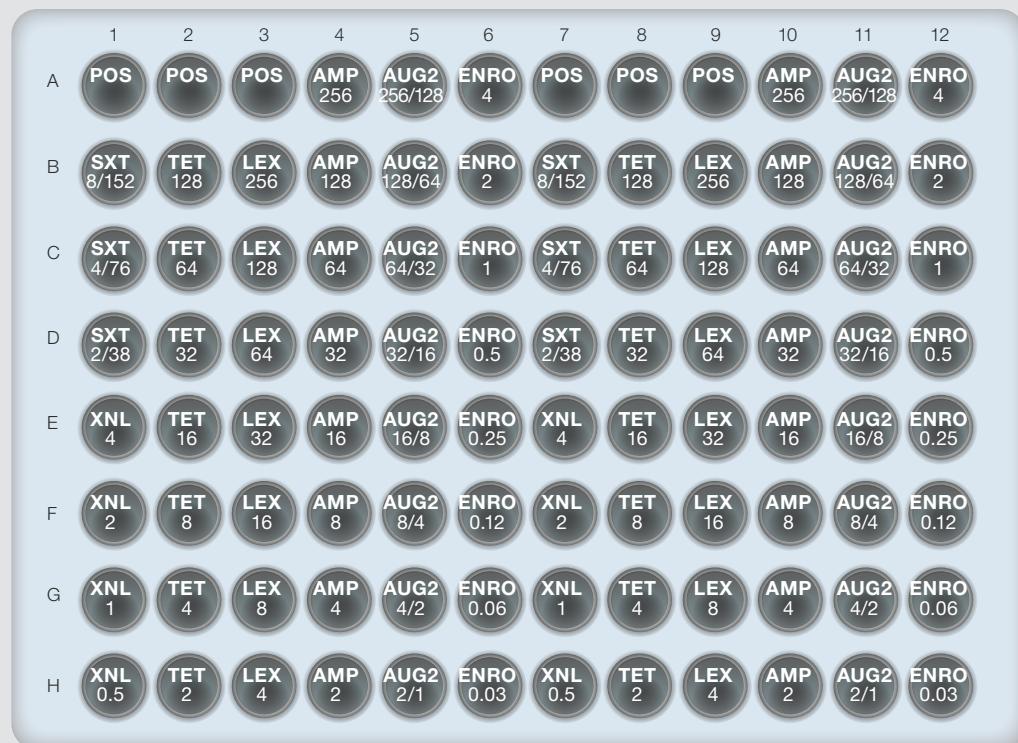
## Antimicrobics

AMI	Amikacin
AMP	Ampicillin
FAZ	Cefazolin
TAZ	Ceftazidime
XNL	Ceftiofur
CHL	Chloramphenicol
CLA	Clarithromycin
DOX	Doxycycline
ENRO	Enrofloxacin
ERY	Erythromycin
GEN	Gentamicin
IMI	Imipenem
MIN	Minocycline
OXA+	Oxacilllin+2%NaCl
PEN	Penicillin
POS	Positive control
RIF	Rifampin
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole

\*For *Proteus* spp. \*\*For Enterobacteriaceae and Non-Enterobacteriaceae. \*\*\*For aid in detection of resistance mechanisms for Enterobacteriaceae and Non-Enterobacteriaceae.

# Sensititre Vet Urinary CMV1BURF Plate

Intended use	Read method	CLSI recommended routine QC strains	
Broth type	Inoculum preparation		
Antimicrobial susceptibility plate for testing non-fastidious Gram positive and Gram negative isolates of veterinary origin	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



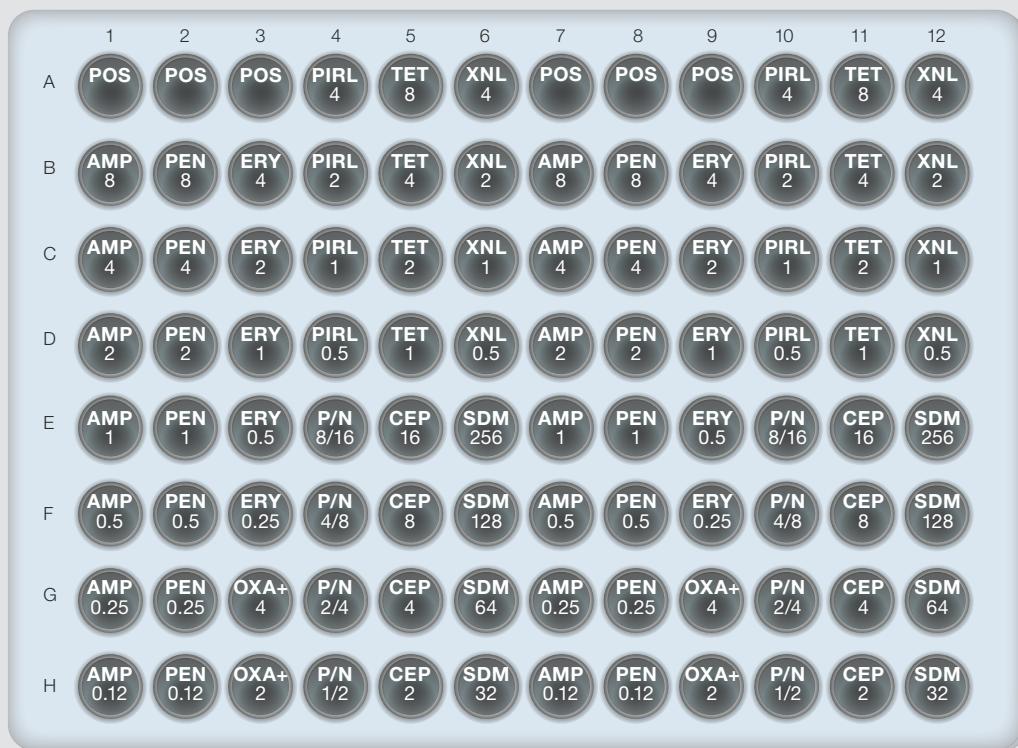
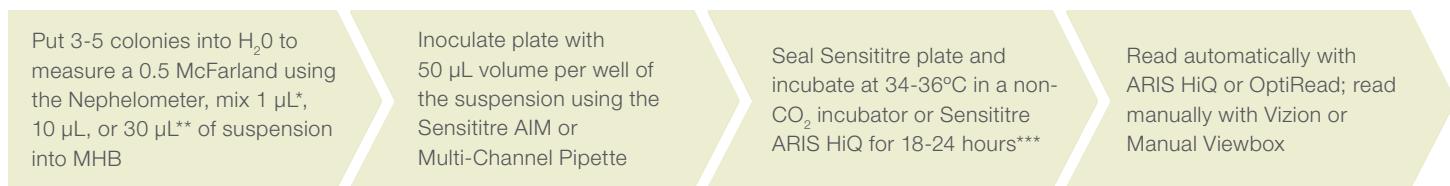
\*For *Proteus* spp. \*\*Ensure detection of hetero-resistant isolates among *Staphylococcus* and *Enterococcus* spp. \*\*\*Incubate for 24 hours to ensure detection of oxacillin-resistant *Staphylococcus* and vancomycin-resistant *Enterococcus* spp.

## Antimicrobics

AUG2	Amoxicillin/Clavulanic acid 2:1 ratio
AMP	Ampicillin
XNL	Ceftiofur
LEX	Cephalexin
ENRO	Enrofloxacin
POS	Positive control
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole

# Sensititre Vet Mastitis CMV1AMAF Plate

Intended use	Read method	CLSI recommended routine QC strains	
Broth type	Inoculum preparation		
Antimicrobial susceptibility plate for testing non-fastidious Gram positive and Gram negative isolates of veterinary origin. (For <i>Streptococcus pneumoniae</i> isolates, contact your local Thermo Fisher Scientific Microbiology representative for protocol specifications)	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



\*For *Proteus* spp. \*\*Ensure detection of hetero-resistant isolates among *Staphylococcus* and *Enterococcus* spp. \*\*\*Incubate for 24 hours to ensure detection of oxacillin-resistant *Staphylococcus* and vancomycin-resistant *Enterococcus* spp.

## Antimicrobics

AMP	Ampicillin
XNL	Ceftiofur
CEP	Cephalothin
ERY	Erythromycin
OXA+	Oxacillin +2% NaCl
PEN	Penicillin
P/N	Penicillin/Novobiocin
PIRL	Pirlimycin
POS	Positive control
SDM	Sulphadimethoxine
TET	Tetracycline

# Sensititre Vet JOEYE2 Plate

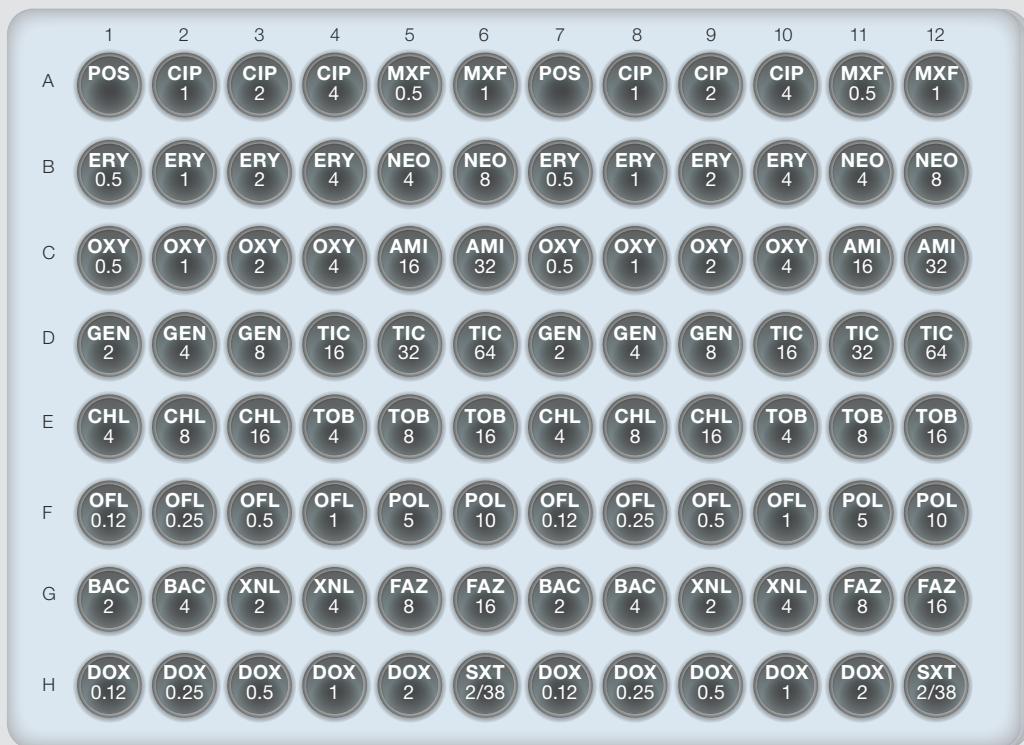
Intended use	Read method	CLSI recommended routine QC strains	
Perform accurate AST with this dual-isolate plate for breakpoint testing of topical compounds	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
Broth type	Inoculum preparation	Culti-Loops product code	Organism description
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer, mix 10 µL of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator for 18-24 hours

Read automatically with ARIS HiQ or OptiRead; read manually with Vizion or Manual Viewbox



## Antimicrobics

AMI	Amikacin
BAC	Bacitracin
FAZ	Cefazolin
XNL	Ceftiofur
CHL	Chloramphenicol
CIP	Ciprofloxacin
DOX	Doxycycline
ERY	Erythromycin
GEN	Gentamicin
MXF	Moxifloxacin
NEO	Neomycin
OFL	Ofloxacin
OXY	Oxytetracycline
POL	Polymixin B
POS	Positive control
TIC	Ticarcillin
TOB	Tobramycin
SXT	Trimethoprim / Sulfa methoxazole

thermo  
scientific

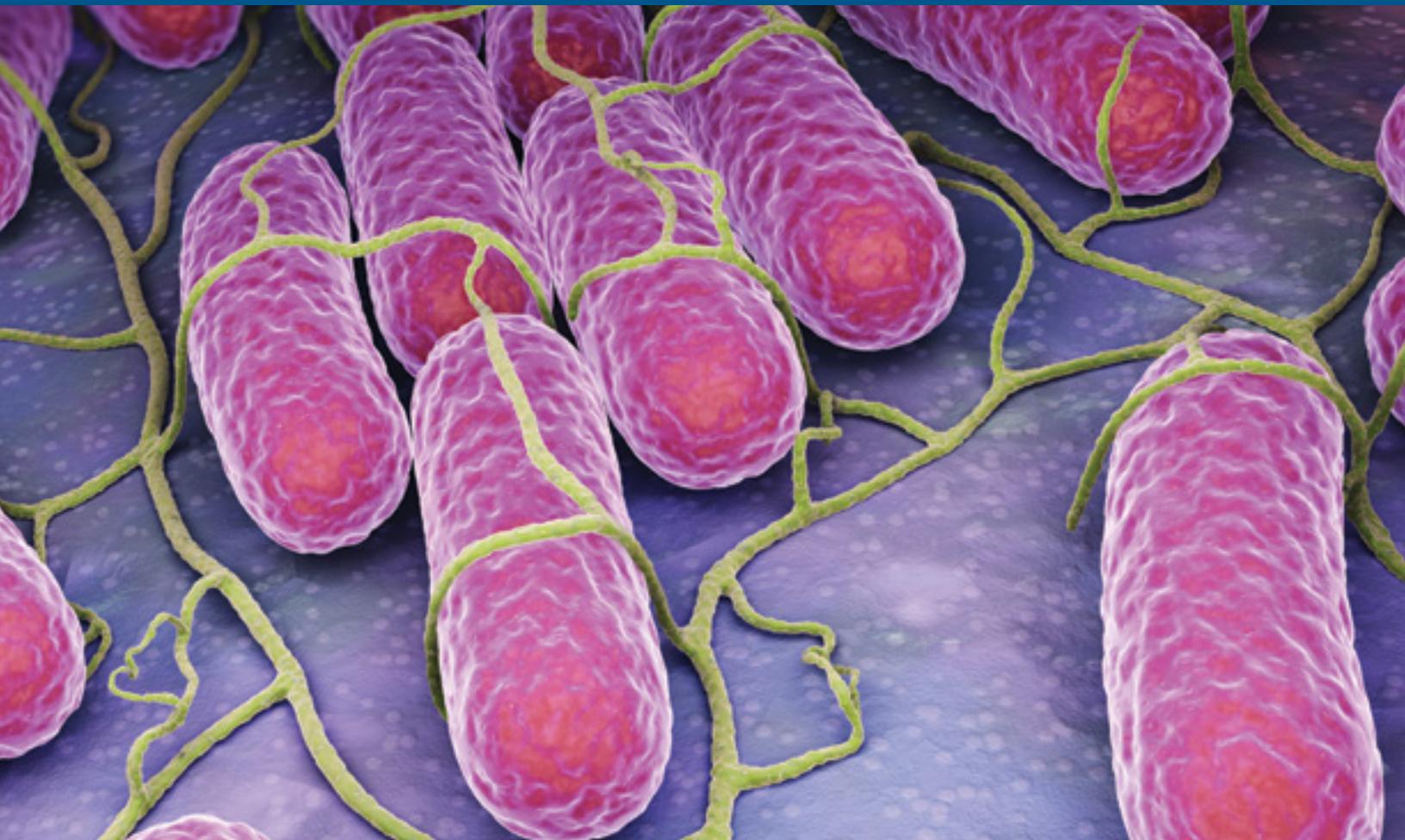




Identifying antimicrobial resistance patterns is vital to your ability to better understand key pathogenic drivers and more effectively respond to emerging resistance.

The Sensititre System provides a standardized AMR surveillance tool to support public health and national reference laboratories, enabling you to comply with government surveillance mandates while streamlining workflow. Harmonize your surveillance AST with the method of choice for global AMR programs, including:

- US National Antimicrobial Resistance Monitoring System (NARMS), coordinated via FDA/CVM, USDA and the CDC
- US CDC Antibiotic Resistance Lab Network
- EU Monitoring System of Zoonoses



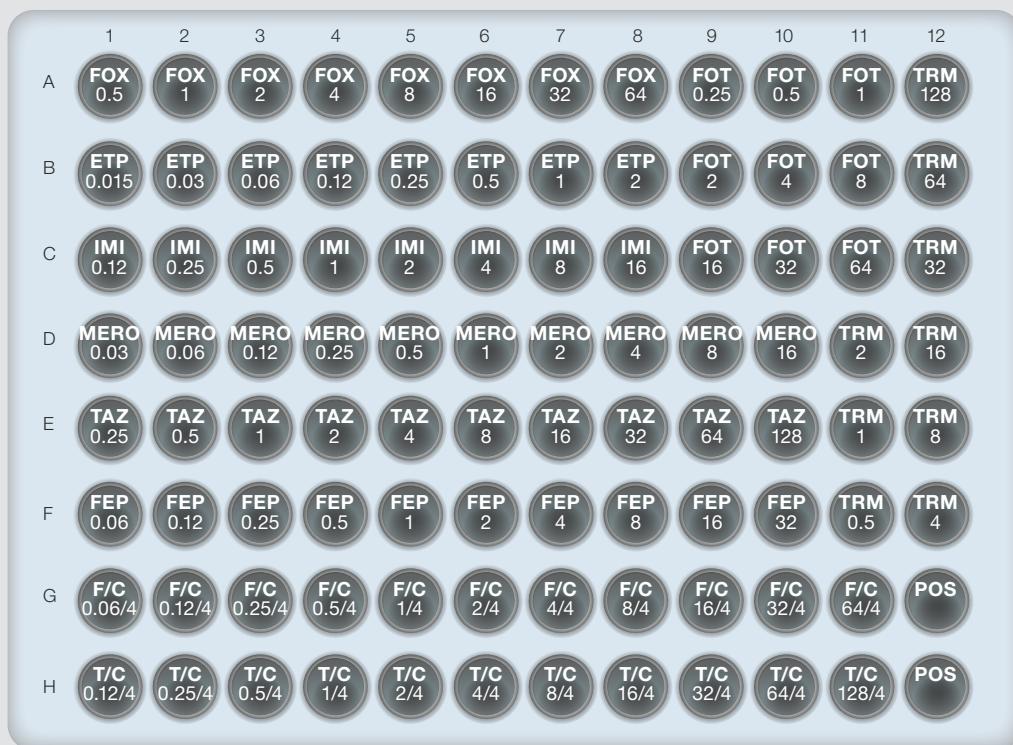
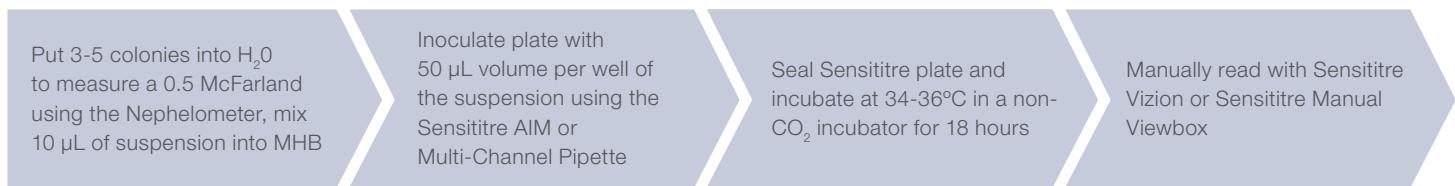
## Surveillance standard plate formats

	INSTRUMENTS	EUROPE				NARMS				
		GRAM NEGATIVE	GRAM POSITIVE	CAMPY	GRAM NEGATIVE	GRAM POSITIVE	CAMPY			
		EUVSEC2	EUVSEC3	EUVENC	EUST2	EUCAMP3	CMV3AGNF	CMV4AGNF	CMV5AGNF	CMV3AGPF
FLUORESCENT PLATES	AUTOREAD, SEMI-AUTOMATED AND MANUAL READ (ARIS HiQ, OptiRead, Vizion, Manual Viewbox)						●	●	●	●
NON-FLUORESCENT PLATES	SEMI-AUTOMATED AND MANUAL READ (Vizion, Manual Viewbox)	●	●	●	●	●			●	●

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# Sensititre EU Surveillance ESBL EUVSEC2 Plate

Intended use	Read method	Recommended routine QC strains
Antimicrobial susceptibility plate for testing ESBL isolates as part of EU surveillance program	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code      Organism description
<b>Broth type</b>	<b>Inoculum preparation</b>	R4607050 <i>Escherichia coli</i> ATCC® 25922™ R4603074 <i>Klebsiella pneumoniae</i> ATCC®700603™ R4607060 <i>Pseudomonas aeruginosa</i> ATCC® 27853™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	Additional QC strains used for product release R4607030 <i>Enterococcus faecalis</i> ATCC® 29212™ R4607011 <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



## Antimicrobics

FEP	Cefepime
FOT	Cefotaxime
F/C	Cefotaxime/Clavulanic acid
FOX	Cefoxitin
TAZ	Ceftazidime
T/C	Ceftazidime/Clavulanic acid
ETP	Ertapenem
IMI	Imipenem
MERO	Meropenem
POS	Positive control
TRM	Temocillin

# Sensititre EU Surveillance

## Salmonella/E. coli EUVSEC3 Plate

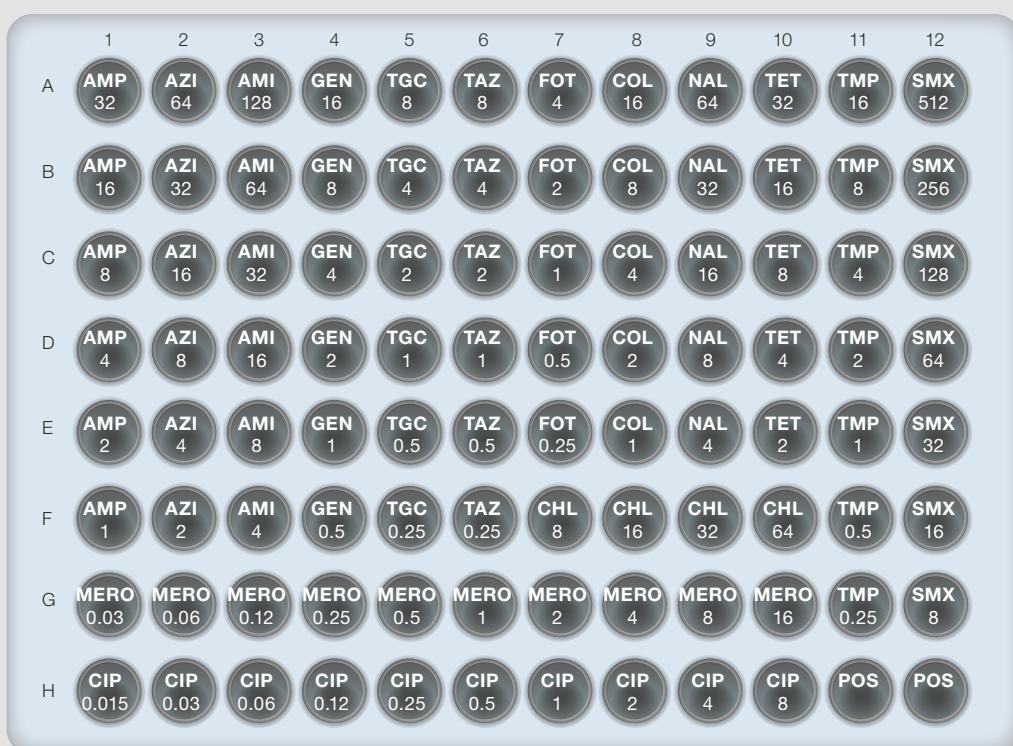
Intended use	Read method	Recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Salmonella</i> and <i>E. coli</i> isolates as part of EU surveillance program	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
Broth type	<b>Inoculum preparation</b>		
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)		
		Culti-Loops product code	Organism description
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		Additional QC strains used for product release	
		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer. Mix 10 µL of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator for 18 hours

Manually read with Sensititre Vizion or Sensititre Manual Viewbox



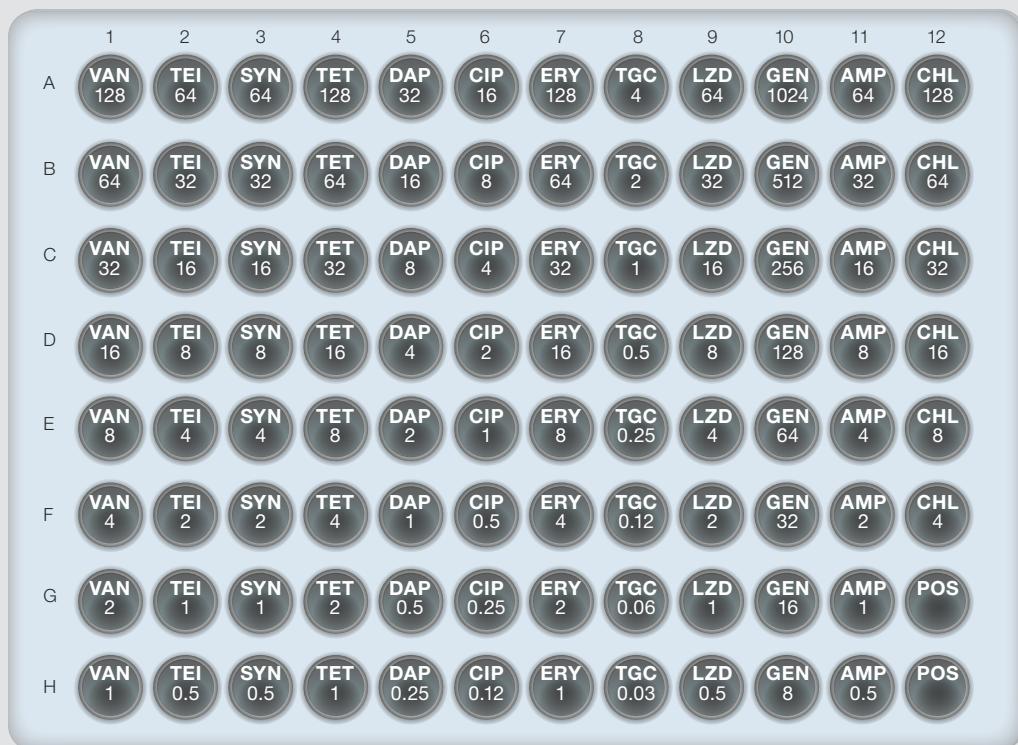
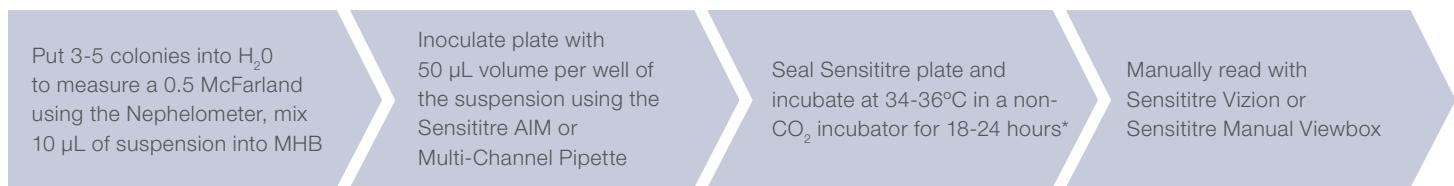
### Antimicrobics

AMI	Amikacin
AMP	Ampicillin
AZI	Azithromycin
FOT	Cefotaxime
TAZ	Ceftazidime
CHL	Chloramphenicol
CIP	Ciprofloxacin
COL	Colistin
GEN	Gentamicin
MERO	Meropenem
NAL	Nalidixic acid
POS	Positive control
SMX	Sulfamethoxazole
TET	Tetracycline
TGC	Tigecycline
TMP	Trimethoprim

# Sensititre EU Surveillance

## Enterococcus EUVENC Plate

Intended use	Read method	Recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Enterococcus</i> isolates as part of EU surveillance program	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
<b>Broth type</b>	<b>Inoculum preparation</b>		
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)		
		Additional QC strains used for product release	
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™



### Antimicrobics

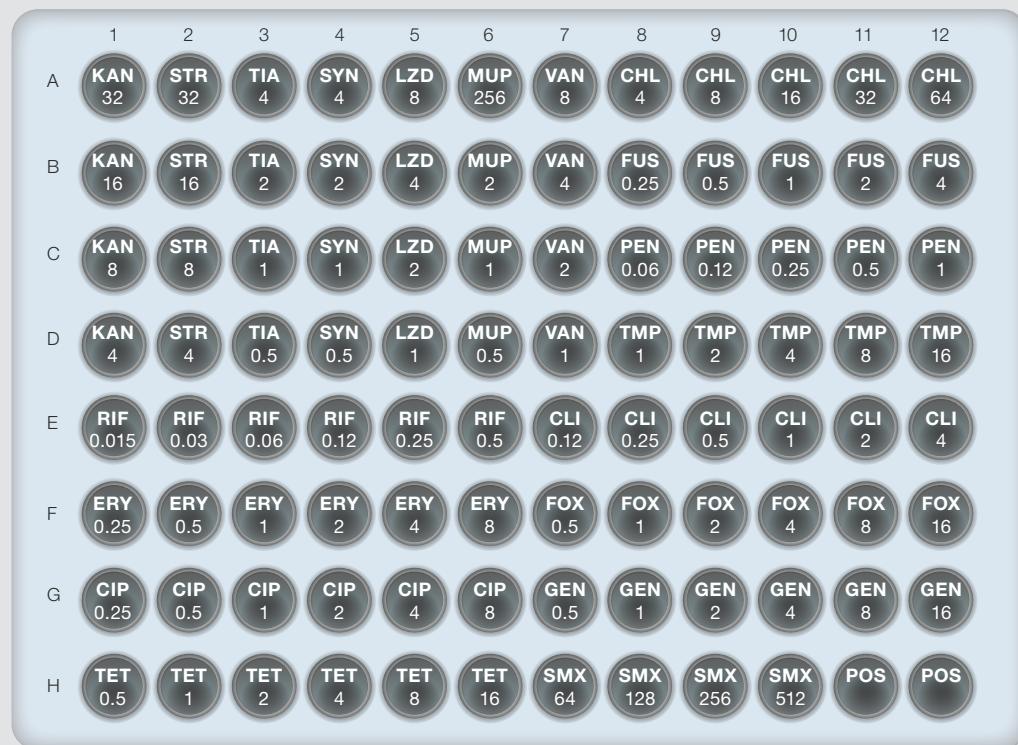
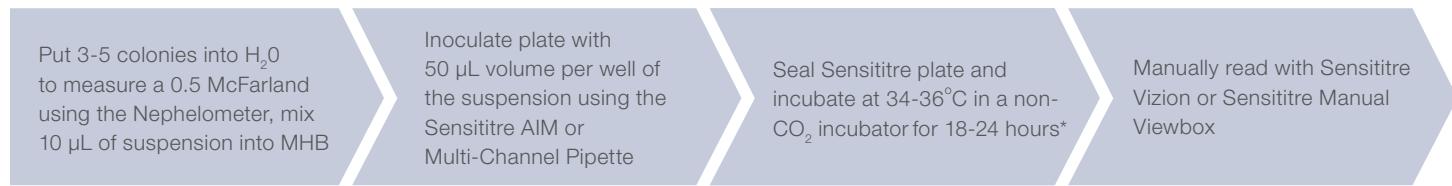
AMP	Ampicillin
CHL	Chloramphenicol
CIP	Ciprofloxacin
DAP	Daptomycin
ERY	Erythromycin
GEN	Gentamicin
LZD	Linezolid
POS	Positive control
SYN	Quinupristin / Dalfopristin
TEI	Teicoplanin
TET	Tetracycline
TGC	Tigecycline
VAN	Vancomycin

\*Incubate for 24 hours to ensure detection of vancomycin-resistant *Enterococcus* spp.

# Sensititre EU Surveillance

## Staphylococcus EUST2 Plate

Intended use	Read method	Recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Staphylococcus</i> isolates as part of EU surveillance program	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
<b>Broth type</b>		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
		Additional QC strains used for product release	
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™



### Antimicrobics

FOX	Cefoxitin
CHL	Chloramphenicol
CIP	Ciprofloxacin
CLI	Clindamycin
ERY	Erythromycin
FUS	Fusidate
GEN	Gentamicin
KAN	Kanamycin
LZD	Linezolid
MUP	Mupirocin
PEN	Penicillin
POS	Positive control
SYN	Quinupristin / Dalfopristin
RIF	Rifampin
STR	Streptomycin
SMX	Sulfamethoxazole
TET	Tetracycline
TIA	Tiamulin
TMP	Trimethoprim
VAN	Vancomycin

\*Incubate for 24 hours to ensure detection of oxacillin-resistant *Staphylococcus*.

# Sensititre EU Surveillance

## Campylobacter EUCAMP3 Plate

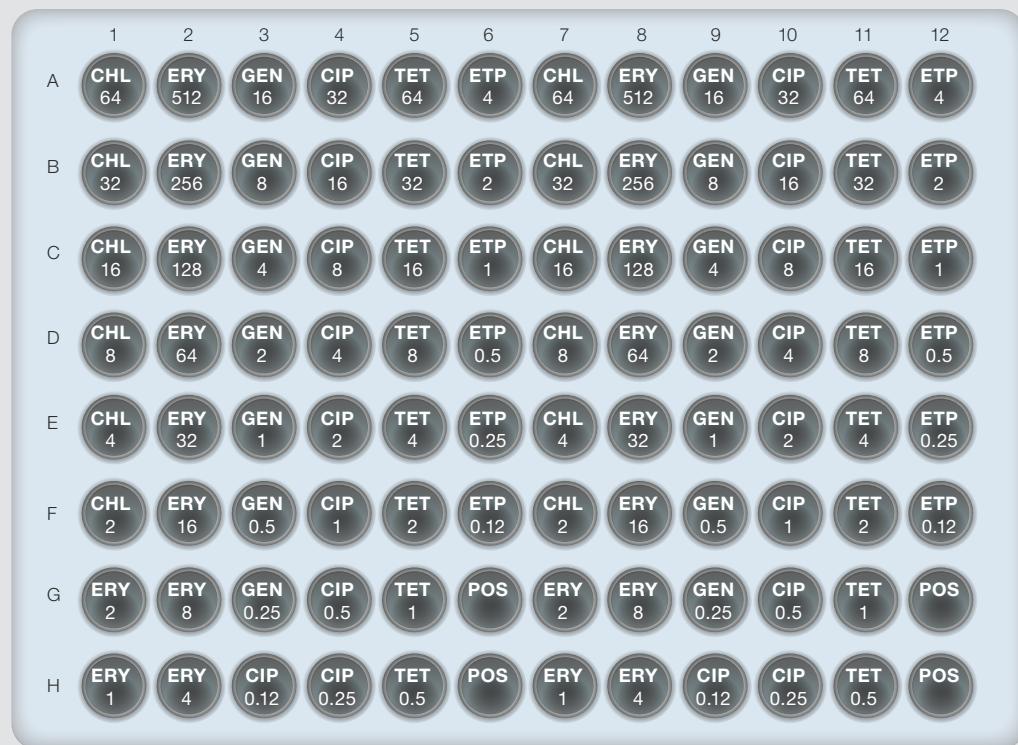
Intended use	Read method	Recommended routine QC strains	
Antimicrobial susceptibility plate for testing Campylobacter isolates as part of EU surveillance program	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
<b>Broth type</b>	<b>Inoculum preparation</b>		
Sensititre Mueller Hinton Broth w/ Lysed Horse Blood (CP112-10)	0.5 McFarland Standard (E1041) Sensititre Mueller Hinton Broth 5 mL (T3462-05)		
		Additional QC strains used for product release	
		R4609498	<i>Campylobacter jejuni</i> subsp. <i>jejuni</i> ATCC® 33560™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		R4607050	<i>Escherichia coli</i> ATCC® 25922™

Put 3-5 colonies into Sensititre MHB 5 mL to reach a 0.5 McFarland Standard, mix 100 µL into Sensititre MHB with LHB

Inoculate plate with 100 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate in a microaerophilic atmosphere\* at 35-37°C for 48 hours or at 42°C for 24 hours\*\*

Manually read with Sensititre Vizion or Sensititre Manual Viewbox



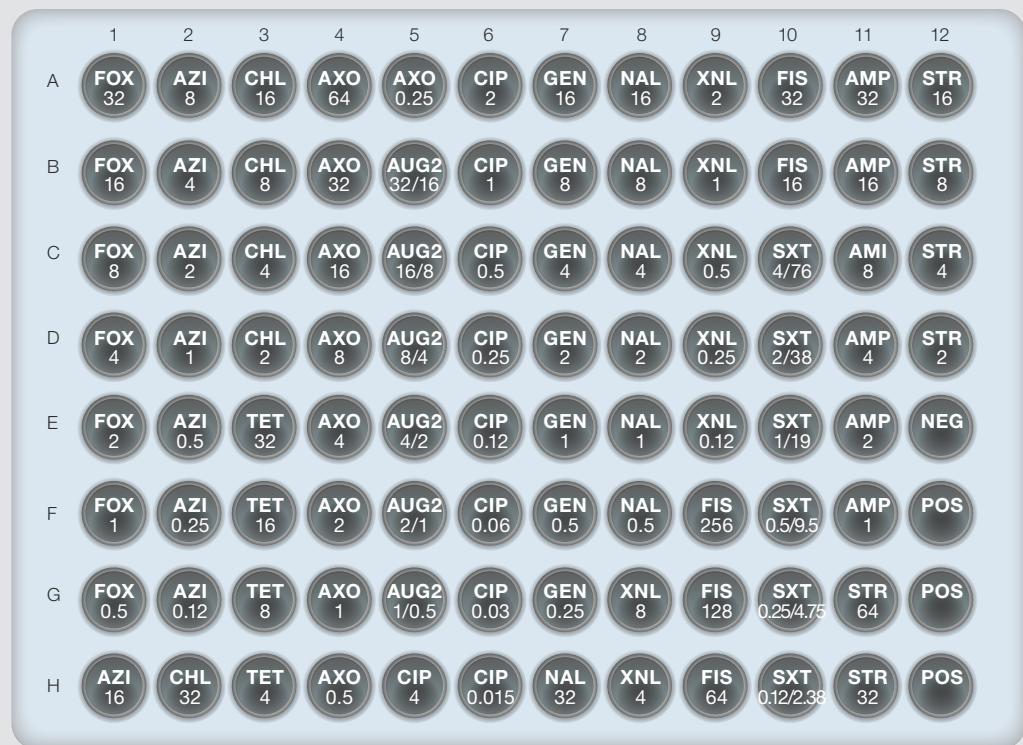
### Antimicrobics

CHL	Chloramphenicol
CIP	Ciprofloxacin
ETP	Ertapenem
ERY	Erythromycin
GEN	Gentamicin
POS	Positive control
TET	Tetracycline

\*85% N<sub>2</sub>, 10% CO<sub>2</sub>, 5% O<sub>2</sub>. \*\*Do not stack plates more than four high.

# Sensititre NARMS Gram Negative CMV3AGNF Plate

Intended use	Read method	Recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Salmonella</i> and <i>Escherichia coli</i> isolates as part of The National Antimicrobial Resistance Monitoring System (NARMS) program in the United States	Autoread or manual Sensititre ARIS HiQ (V3090) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
		R4607050	<i>Escherichia coli</i> ATCC® 25922™
		R4601971	<i>Escherichia coli</i> ATCC® 35218™
		R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™
		Additional QC strains used for product release	
		R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
		R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



## Antimicrobics

AUG2	Amoxicillin / Clavulanic acid 2:1 ratio
AMP	Ampicillin
AZI	Azithromycin
FOX	Cefoxitin
XNL	Ceftiofur
AXO	Ceftriaxone
CHL	Chloramphenicol
CIP	Ciprofloxacin
GEN	Gentamicin
NAL	Nalidixic acid
NEG	Negative control
POS	Positive control
STR	Streptomycin
FIS	Sulfisoxazole
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole

# Sensititre NARMS Gram Negative CMV4AGNF Plate

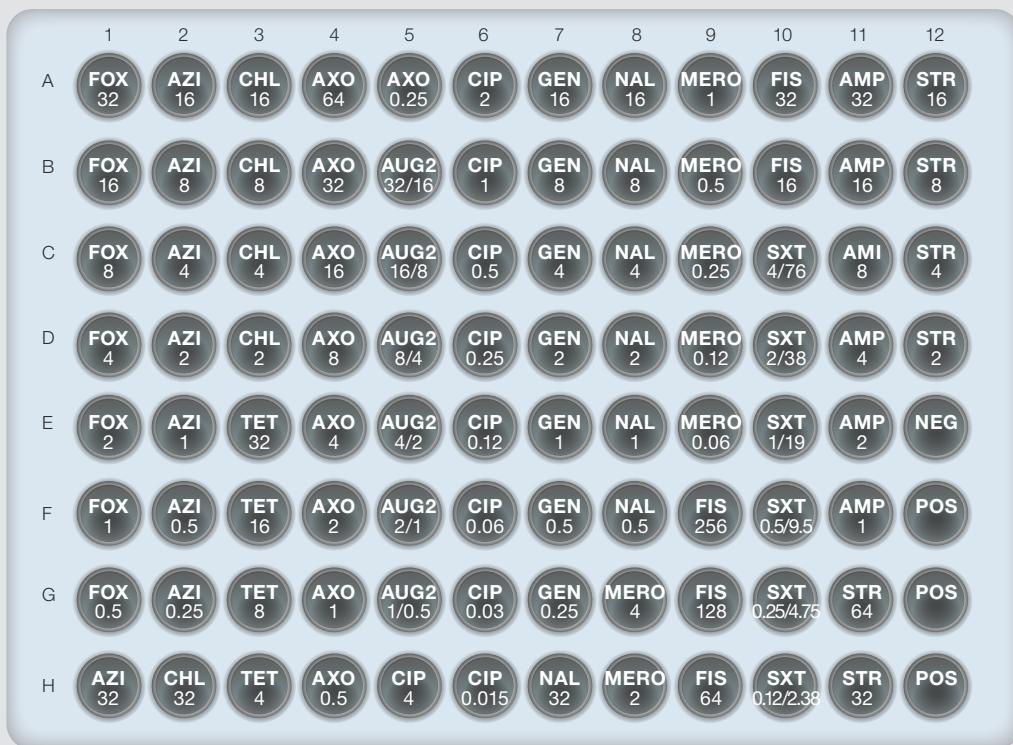
Intended use	Read method	Recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Salmonella</i> and <i>Escherichia coli</i> isolates as part of The National Antimicrobial Resistance Monitoring System (NARMS) program in the United States	Autoread or manual Sensititre ARIS HiQ (V3090) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code	Organism description
R4607050	<i>Escherichia coli</i> ATCC® 25922™		
R4601971	<i>Escherichia coli</i> ATCC® 35218™		
R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™		
Additional QC strains used for product release			
R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™		
R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™		

Put 3-5 colonies into H<sub>2</sub>O to measure a 0.5 McFarland using the Nephelometer. Mix 10 µL of suspension into MHB

Inoculate plate with 50 µL volume per well of the suspension using the Sensititre AIM or Multi-Channel Pipette

Seal Sensititre plate and incubate at 34-36°C in a non-CO<sub>2</sub> incubator or Sensititre ARIS HiQ for 18 hours

Read automatically with ARIS HiQ or OptiRead; read manually with Vizion or Manual Viewbox

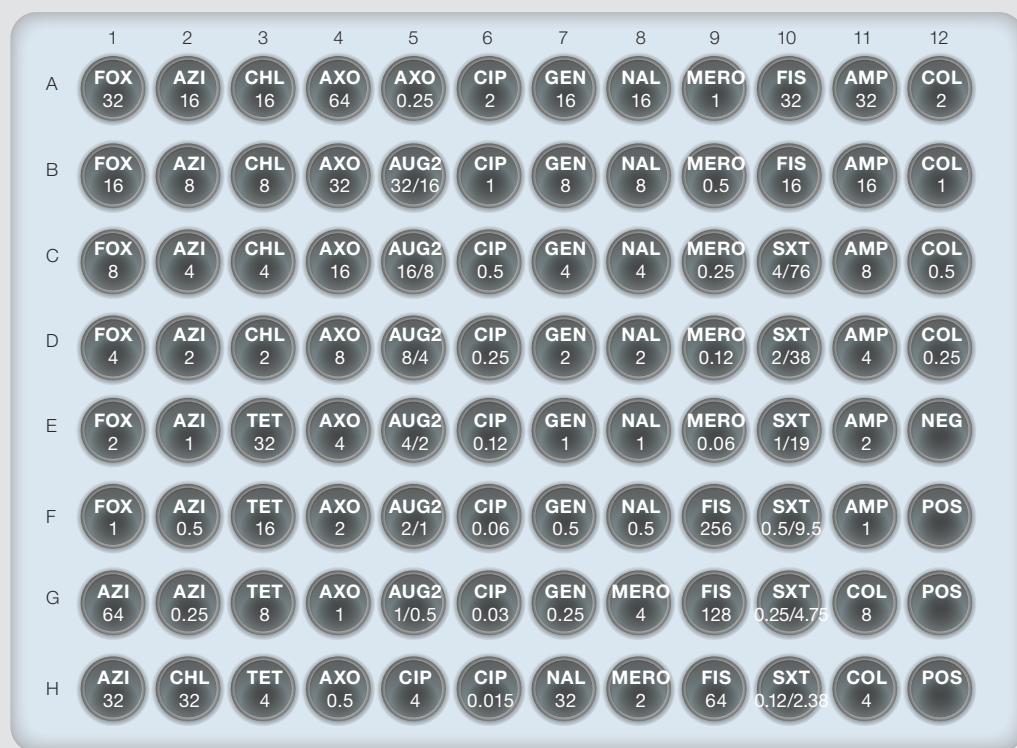


## Antimicrobics

AUG2	Amoxicillin / Clavulanic acid 2:1 ratio
AMP	Ampicillin
AZI	Azithromycin
FOX	Cefoxitin
AXO	Ceftriaxone
CHL	Chloramphenicol
CIP	Ciprofloxacin
GEN	Gentamicin
MERO	Meropenem
NAL	Nalidixic acid
NEG	Negative control
POS	Positive control
STR	Streptomycin
FIS	Sulfisoxazole
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole

# Sensititre NARMS Gram Negative CMV5AGNF Plate

Intended use	Read method	Recommended routine QC strains
Antimicrobial susceptibility plate for testing <i>Salmonella</i> and <i>Escherichia coli</i> isolates as part of The National Antimicrobial National Antimicrobial Resistance Monitoring System (NARMS) program in the United States	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code      Organism description
Broth type	Inoculum preparation	R4607050 <i>Escherichia coli</i> ATCC® 25922™ R4601971 <i>Escherichia coli</i> ATCC® 35218™ R4607060 <i>Pseudomonas aeruginosa</i> ATCC® 27853™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	Additional QC strains used for product release R4607030 <i>Enterococcus faecalis</i> ATCC® 29212™ R4607011 <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™



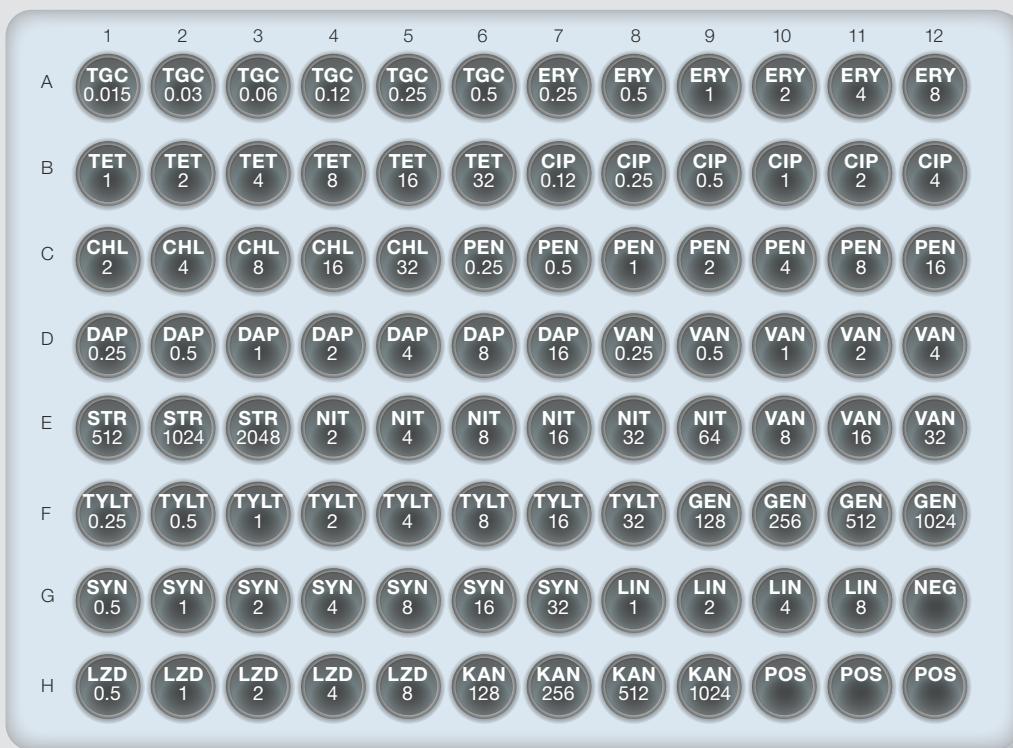
## Antimicrobics

AUG2	Amoxicillin/Clavulanic acid 2:1 ratio
AMP	Ampicillin
AZI	Azithromycin
FOX	Cefoxitin
AXO	Ceftriaxone
CHL	Chloramphenicol
CIP	Ciprofloxacin
COL	Colistin
GEN	Gentamicin
MERO	Meropenem
NAL	Nalidixic acid
NEG	Negative control
POS	Positive control
FIS	Sulfisoxazole
TET	Tetracycline
SXT	Trimethoprim / Sulfamethoxazole

# Sensititre NARMS Gram Positive CMV3AGPF Plate

Intended use	Read method
Antimicrobial susceptibility plate for testing <i>Enterococcus</i> isolates as part of the National Antimicrobial Resistance Monitoring System (NARMS) program in the United States	Autoread or manual Sensititre ARIS HiQ (V4000) Sensititre OptiRead (V3030) Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)
Broth type	Inoculum preparation
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)

Recommended routine QC strains	
Culti-Loops product code	Organism description
R4607030	<i>Enterococcus faecalis</i> ATCC® 29212™
R4601996	<i>Enterococcus faecalis</i> ATCC® 51299™
R4607011	<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
Additional QC strains used for product release	
R4607050	<i>Escherichia coli</i> ATCC® 25922™
R4607060	<i>Pseudomonas aeruginosa</i> ATCC® 27853™



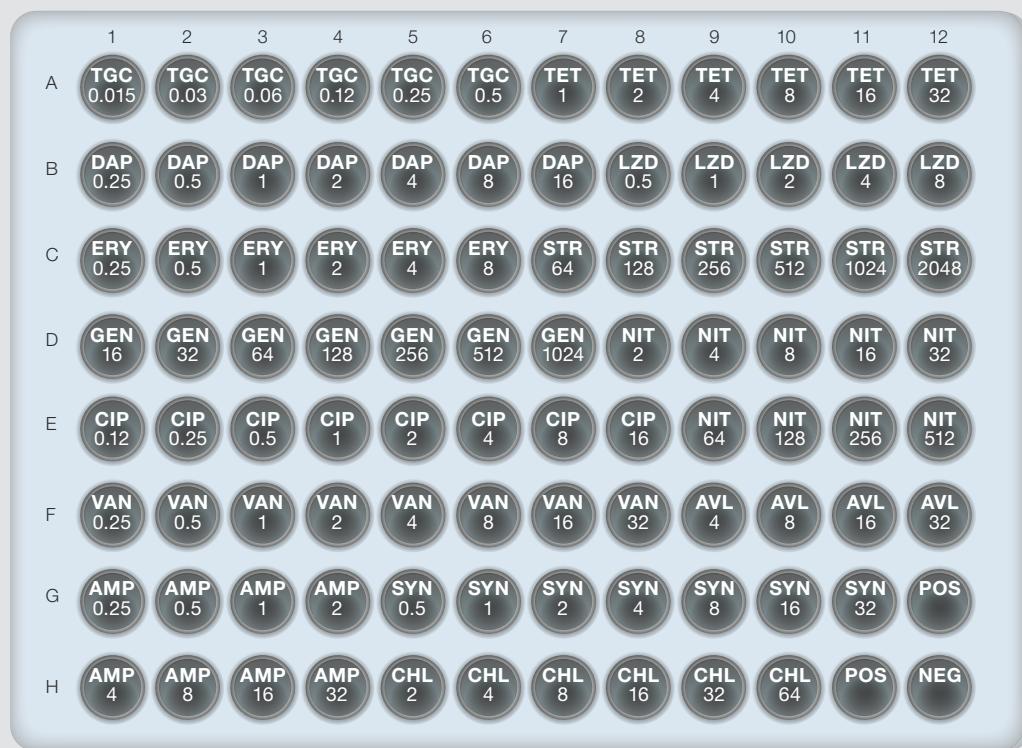
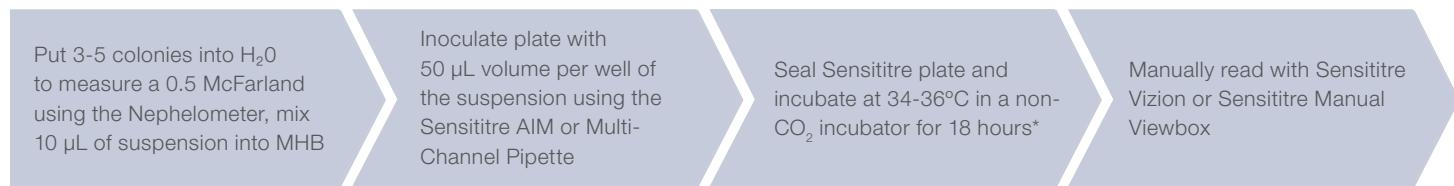
## Antimicrobics

CHL	Chloramphenicol
CIP	Ciprofloxacin
DAP	Daptomycin
ERY	Erythromycin
GEN	Gentamicin
KAN	Kanamycin
LZD	Linezolid
LIN	Lincomycin
NEG	Negative control
NIT	Nitrofurantoin
PEN	Penicillin
POS	Positive control
SYN	Quinupristin/Dalfopristin
STR	Streptomycin
TET	Tetracycline
TGC	Tigecycline
TYLT	Tylosin tartate
VAN	Vancomycin

\*Linezolid and nitrofurantoin should be read manually at 18 hours and vancomycin should be read manually at 24 hours.

# Sensititre NARMS Gram Positive CMV4AGP Plate

Intended use	Read method	Recommended routine QC strains
Antimicrobial susceptibility plate for testing <i>Enterococcus</i> isolates as part of the National Antimicrobial Resistance Monitoring System (NARMS) program in the United States	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)	Culti-Loops product code      Organism description
Broth type	Inoculum preparation	R4607030 <i>Enterococcus faecalis</i> ATCC® 29212™
Sensititre Mueller Hinton Broth (T3462)	0.5 McFarland Standard (E1041) Sensititre Sterile Water (T3339)	R4601996 <i>Enterococcus faecalis</i> ATCC® 51299™
		R4607011 <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™
		Additional QC strains used for product release
		R4607050 <i>Escherichia coli</i> ATCC® 25922™
		R4607060 <i>Pseudomonas aeruginosa</i> ATCC® 27853™



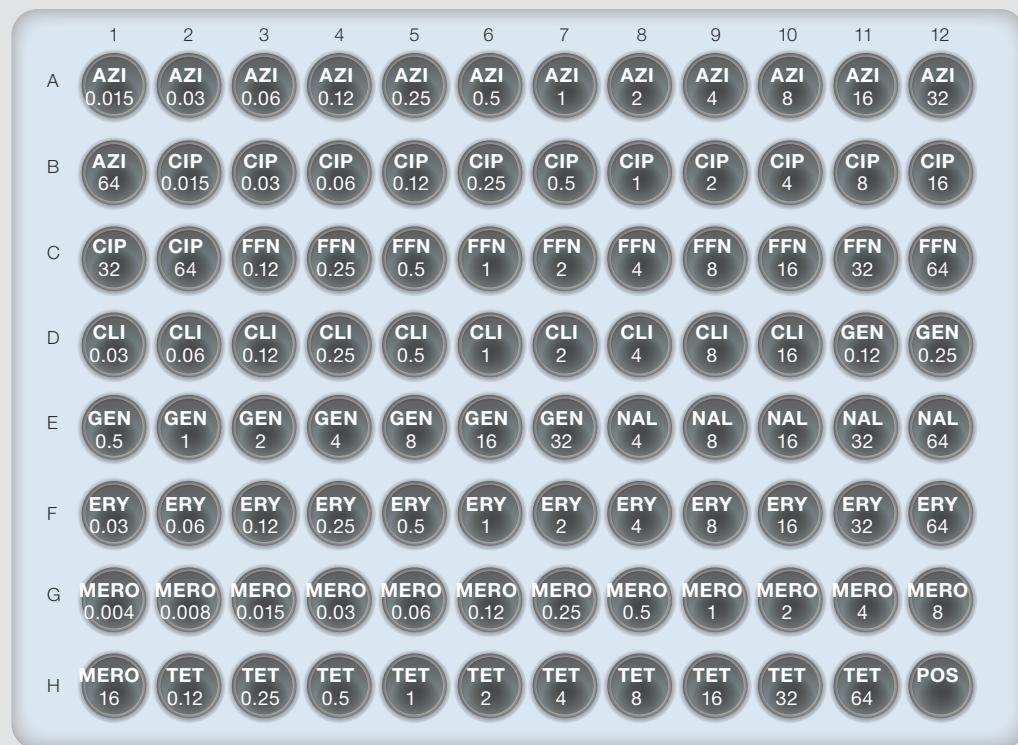
## Antimicrobics

AMP	Ampicillin
AVL	Avilamycin
CHL	Chloramphenicol
CIP	Ciprofloxacin
DAP	Daptomycin
ERY	Erythromycin
GEN	Gentamicin
LZD	Linezolid
NEG	Negative control
NIT	Nitrofurantoin
POS	Positive control
SYN	Quinupristin/Dalfopristin
STR	Streptomycin
TET	Tetracycline
TGC	Tigecycline
VAN	Vancomycin

\*Linezolid and nitrofurantoin should be read manually at 18 hours and vancomycin should be read manually at 24 hours.

# Sensititre NARMS Campylobacter CMVCAMPY Plate

Intended use	Read method	Recommended routine QC strains	
Antimicrobial susceptibility plate for testing <i>Campylobacter</i> isolates part of The National Antimicrobial Resistance Monitoring System (NARMS) program in the United States	<b>Manual</b> Sensititre Vizion (V2021) Sensititre Manual Viewbox (V4007)		
<b>Broth type</b>	<b>Inoculum preparation</b>		
Sensititre Mueller-Hinton broth and lysed horse blood (CP112)	0.5 McFarland Standard (E1041) Sensititre Mueller Hinton Broth 5 mL (T3462-05)		
		Culti-Loops product code   Organism description R4609498   <i>Campylobacter jejuni</i> subsp. <i>jejuni</i> ATCC® 33560™  Additional QC strains used for product release R4607030   <i>Enterococcus faecalis</i> ATCC® 29212™ R4607050   <i>Escherichia coli</i> ATCC® 25922™ R4607060   <i>Pseudomonas aeruginosa</i> ATCC® 27853™ R4607011   <i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC® 29213™	



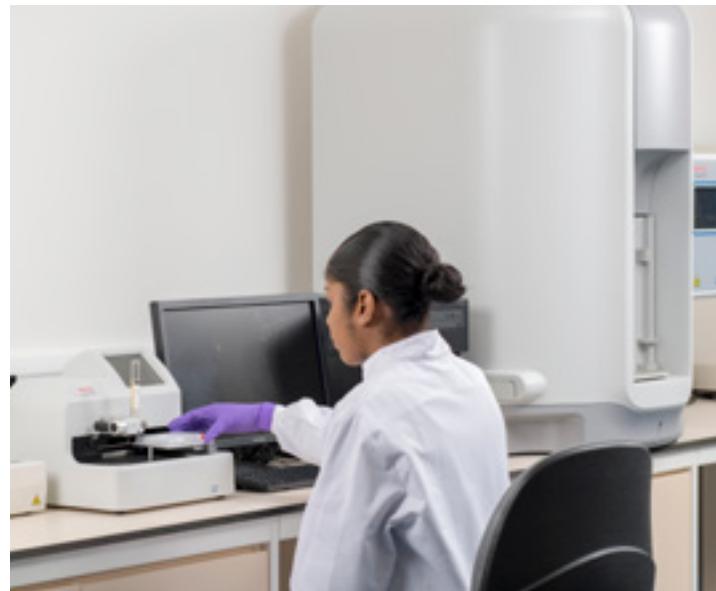
## Antimicrobics

AZI	Azithromycin
CIP	Ciprofloxacin
CLI	Clindamycin
ERY	Erythromycin
FFN	Florfenicol
GEN	Gentamicin
MERO	Meropenem
NAL	Nalidixic acid
POS	Positive control
TET	Tetracycline

# Customer service and installation

Thermo Fisher Scientific is committed to providing industry-leading customer service. An important part of this service is provided by our dedicated technical support experts. Our team of friendly, experienced microbiologists and engineers are available to give product advice or to help with any technical questions or issues you may have, in your local language.

We provide an end-to-end solution for instrument installation, support and servicing through a network of fully trained Field Service Engineers. And, we can help you set your laboratory up for success and ensure high productivity with a Thermo Scientific™ Extended Service Agreement.



Thermo Fisher Scientific is equipped to deliver a variety of global services to keep you up and running. From preventative maintenance and corrective services to continued application assistance provided by technical scientists, get tailored solutions and exceptional support from the experts in microbiology.

When you choose Thermo Scientific products for your microbiology needs, consider it the start of a valuable partnership. Whether you need assistance with protocols, product transitions or troubleshooting, our team of experts is ready to help.

For more information on how to find solutions perfectly matched for your AST program, please contact your local Thermo Fisher Scientific Microbiology representative or visit us at [thermofisher.com/AST](http://thermofisher.com/AST)

# Supporting you along your Sensititre journey

To provide you with the highest level of support, we have dedicated teams globally to answer your everyday questions and needs. Our objective is to ensure you receive superior personalized service regardless of your geographical location, thereby supporting lab productivity.

To assist you with your inquiries, our Technical Support teams will ask for preliminary information such as:

- Plate code
- Lot number
- Expiry
- Description of problem

Further information will be asked on:

- Organism/drug
- Quality control including organism storage and use
- Sample preparation including broth and McFarland details
- Plate reading
- Software
- Service status of your instruments

## **Local Technical Support contact details:**

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# Trust in the quality of the Sensititre System

From the receipt of a new antimicrobial compound to a finished broth microdilution plate, the Sensititre plate manufacturing process is thoroughly quality controlled to ensure the utmost integrity of our products.

The manufacturing process is carefully monitored and the finished product tested for performance with as many as 14 different quality control (QC) organisms. All plates undergo the same intensity of testing regardless of whether they will be used as Research Use Only, Veterinary Use or In-vitro Diagnostic Use, ensuring our commitment to product quality and performance.



## The manufacturing process

Antimicrobial compound check: potency & solubility

Fresh stock suspensions for each day of manufacture

Liquid level check of dosed plates

Continuous in-process monitoring of manufacturing equipment

Performance QC testing

Labelling & packaging check

Product release

# Quality control

To ensure your laboratory antimicrobial susceptibility testing solutions are providing accurate and reliable results the need for comprehensive Quality Control (QC) testing is paramount. Thermo Scientific™ Culti-Loops™ Quality Control organisms enable quick and safe preparation of cultures for QC testing. They are ready-to-use bacteriological loops containing gel-stabilised micro-organisms. Each loop is individually packaged in a foil pouch and each pack contains five loops.

Culti-Loops offer a full portfolio of QC strains according to recommendations by CLSI and EUCAST; the strains are fully characterised harbouring a variety of antimicrobial resistance patterns.

To recover the organism, follow the three simple set up steps:



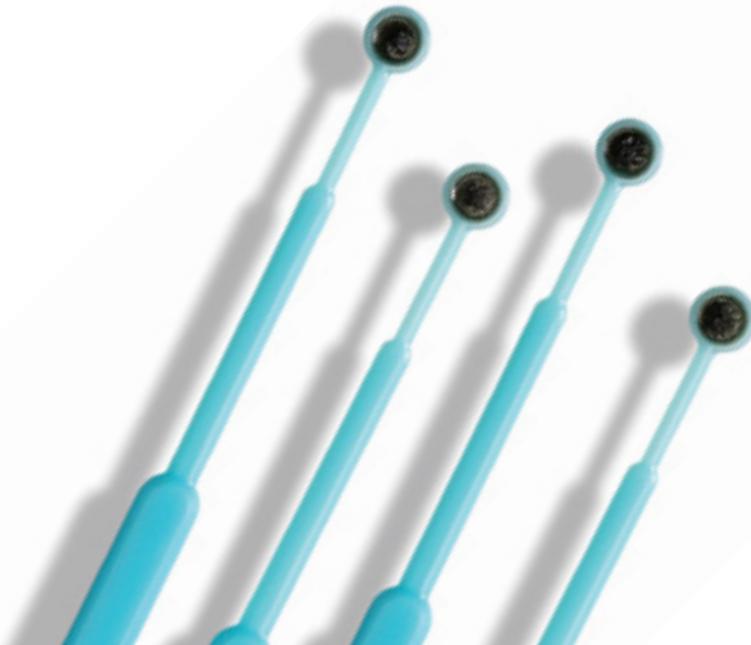
Open package



Apply to warm agar



Incubate



Perform quality control testing with the most comprehensive range of microorganism strains recommended by CLSI and EUCAST. Culti-Loops enable quick and safe preparation of ATCC® and NCTC cultures for QC testing. They are ready-to-use bacteriological loops containing gel-stabilised micro-organisms. Each loop is individually packaged in a foil pouch in a pack of five loops.

Below is a list of Culti-Loops containing the recommended QC strains for EUCAST and CLSI test methods:

Culti-Loops part number	Description	ATCC® strain	Characteristics	EUCAST		CLSI	
				Routine testing	Extended testing	Routine testing	Extended testing
R4601312	<i>Aspergillus flavus</i>	204304™		✓		✓	
R4601311	<i>Aspergillus fumigatus</i>	204305™		✓			
R4601250	<i>Bacteroides fragilis</i>	25285™	β-lactamase positive.			✓	
R4601260	<i>Bacteroides thetaiotaomicron</i>	29741™	β-lactamase positive.			✓	
R4609498	<i>Campylobacter jejuni</i>	33560™		✓		✓	
R4601496	<i>Candida albicans</i>	90028™				✓	
R4601518	<i>Candida parapsilosis</i>	22019™		✓		✓	
R4609452	<i>Clostridioides difficile</i>	700057™	β-lactamase negative.			✓	
R4601951	<i>Eggerthella lenta</i>	43055™				✓	
R4607030	<i>Enterococcus faecalis</i>	29212™		✓		✓	✓
R4601996	<i>Enterococcus faecalis</i>	51299™	Glycopeptide/low-level vancomycin resistance; <i>vanB</i> positive. High-level aminoglycoside resistance; gentamicin and streptomycin resistant.			✓	✓
R4601301	<i>Enterococcus faecalis</i>	33186™	Suitability of Mueller-Hinton media testing.				✓
R4601307	<i>Escherichia coli</i>	NCTC 13353	ESBL producer; CTX-M-15, Cephalosporin resistant.			✓	
R4601314	<i>Escherichia coli</i>	NCTC 13846	Colistin resistant; <i>mcr-1</i> positive.	✓			
R4607050	<i>Escherichia coli</i>	25922™	β-lactamase negative.	✓		✓	
R4601971	<i>Escherichia coli</i>	35218™	β-lactamase producing strain; TEM-1. Non-ESBL.	✓		✓	
R4603810	<i>Haemophilus influenzae</i>	10211™					✓
R4603830	<i>Haemophilus influenzae</i>	49247™	BLNAR (β-lactamase negative, ampicillin resistant); Reduced susceptibility to β-lactam agents due to PBP mutations.			✓	✓
R4603806	<i>Haemophilus influenzae</i>	49766™	Ampicillin susceptible.	✓		✓	
R4601520	<i>Isatchenkia orientalis</i>	6258™		✓		✓	
R4603074	<i>Klebsiella quasipneumoniae</i>	700603™	ESBL producer; SHV-18. Carbapenemase producer; OXA-2. Mutations in OmpK35 and OmpK37 outer membrane porins.	✓	✓	✓	
R4609384	<i>Klebsiella pneumoniae</i>	BAA-1705™	Carbapenemase producer; KPC-2. β-lactamase producer; SHV, TEM.			✓	
R4609385	<i>Klebsiella pneumoniae</i>	BAA-1706™	Carbapenemase negative.				✓
R4601316	<i>Klebsiella pneumoniae</i>	BAA-2814™	Carbapenemase producer; KPC-3. β-lactamase producer; SHV-11, TEM-1.	✓		✓	
R4609006	<i>Neisseria gonorrhoeae</i>	49226™	CMRNG (Chromosome-mediated resistant Neisseria gonorrhoeae): Low level chromosome mediated resistant to penicillin.			✓	
R4607060	<i>Pseudomonas aeruginosa</i>	27853™	Inducible AmpC β-lactamase.	✓		✓	
R4609389	<i>Staphylococcus aureus</i>	BAA-1708™	High-level mupirocin resistance; <i>mupA</i> positive.				✓
R4607010	<i>Staphylococcus aureus</i>	25923™	β-lactamase negative, <i>mecA</i> negative, <i>mupA</i> negative.			✓	✓
R4607011	<i>Staphylococcus aureus</i>	29213™	Weak β-lactamase-producing strain, <i>mecA</i> negative, <i>mupA</i> negative.	✓		✓	✓
R4609022	<i>Staphylococcus aureus</i>	43300™	Methicillin and Oxacillin resistant MRSA; <i>mecA</i> positive.			✓	
R4606512	<i>Staphylococcus aureus</i>	BAA-976™	Macrolide resistant; <i>msrA</i> positive. Inducible clindamycin resistance negative control.			✓	✓
R4606513	<i>Staphylococcus aureus</i>	BAA-977™	Inducible <i>ermA</i> -mediated macrolide resistance. Inducible clindamycin resistance positive control.				✓
R4601313	<i>Staphylococcus aureus</i>	NCTC 12493	Methicillin resistant MRSA; <i>mecA</i> positive.			✓	
R4609015	<i>Streptococcus pneumoniae</i>	49619™	Reduced susceptibility to benzylpenicillin.	✓		✓	



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# More antimicrobials, more testing options

Our formulary capabilities extends beyond our standard formats. For custom antimicrobics, plate formats and dilution ranges, please contact for further information.

Thermo Scientific Sensititre Standard Formularies – Clinical																		
Code	Antimicrobial	Gram negative First line		Gram negative Second line			Non-fermenters	Gram positive			Fastidious		Anaerobes	Yeast	Mycobacteria			
		EUGNF	EUMDRXXF	DKMGN	EURGN COL	EUX2NF		EUSTAFF	EUENCF	FRSTENT	STP6F	HIPB1			Y010	ITAMYUCC	MYCOTBI	RAPMYCOI
FC	5-Flucytosine														✓			
AMI	Amikacin	✓	✓	✓			✓									✓	✓	✓
AMOX	Amoxicillin				✓				✓				✓					
AUGC	Amoxicillin/Clavulanic Acid								✓									
AUG2	Amoxicillin/Clavulanic Acid 2:1										✓	✓	✓					✓
AB	Amphotericin B														✓	✓		
AMP	Ampicillin								✓	✓		✓						
A/S2	Ampicillin/Sulbactam											✓						
AND	Anidulafungin														✓	✓		
AZI	Azithromycin										✓							
AZT	Aztreonam	✓	✓	✓			✓											
CAR	Carbenicillin																	
CAS	Caspofungin														✓	✓		
FAC	Cefaclor											✓						
FAZ	Cefazolin									✓								
FEP	Cefepime	✓	✓				✓				✓	✓						✓
FDC	Cefiderocol		✓										✓					
FIX	Cefixime											✓						
FOP	Cefoperazone																	
FOT	Cefotaxime	✓		✓							✓							
F/C	Cefotaxime/Clavulanic Acid																	
TANS	Cefotetan Na																	
FOX	Cefoxitin								✓				✓					✓
FOXS	Cefoxitin Screen								✓									
POD	Cefpodoxime																	
CPT	Ceftaroline								✓	✓								
TAZ	Ceftazidime	✓		✓			✓											
CZA	Ceftazidime/Avibactam		✓	✓	✓													
T/C	Ceftazidime/Clavulanic Acid																	
BPR	Ceftobiprole										✓							
C/T	Ceftolozane/Tazobactam	✓	✓	✓	✓													✓
AXO	Ceftriroxine											✓	✓					
FUR	Cefuroxime										✓	✓						
CEP	Cephalexin																	
CHL	Chloramphenicol										✓	✓	✓					
CIP	Ciprofloxacin	✓		✓			✓		✓								✓	✓
CLA	Clarithromycin											✓					✓	✓
CLI	Clindamycin								✓	✓	✓							
CFZ	Clofazimine																	
COL	Colistin*	✓	✓	✓	✓	✓	✓											
CYC	Cycloserine																✓	
DAL	Dalbavancin										✓							
DAP	Daptomycin								✓		✓	✓						
DLX	Delafloxacin																	
DOR	Doripenem	✓					✓											

## Thermo Scientific Sensititre Standard Formularies – Clinical

Code	Antimicrobial	Gram negative First line	Gram negative Second line			Non- fermenters	Gram positive		Fastidious	Anaerobes	Yeast	Mycobacteria					
		EUGNF	EUMDRXXF	DKMGN	EURGNOL		EUX2NF	EUSTAFF	EUENCF	FIRSTENT	STP6F	HPB1	Y010	ITAMYUCC	MYCOTBI	RAPMYCOI	SLOMYCOI
DOX	Doxycycline	✓													✓	✓	
DT1,2	D-Test								✓								
ERV	Eravacycline			✓													
ERY	Erythromycin								✓			✓					
ETP	Ertapenem	✓		✓							✓						
EMB	Ethambutol														✓	✓	
ETH	Ethionamide													✓		✓	
FZ	Fluconazole													✓	✓		
FOS+	Fosfomycin		✓														
FUS	Fusidate								✓								
GEN	Gentamicin	✓		✓			✓		✓								
IMI	Imipenem	✓	✓	✓			✓		✓			✓				✓	
IMR	Imipenem/relebactam																
ISAV	Isavuconazole													✓			
INH	Isoniazid													✓		✓	
IZ	Itraconazole													✓	✓		
KAN	Kanamycin															✓	
KZ	Ketoconazole																
LEVO	Levofloxacin	✓					✓		✓		✓	✓					
LZD	Linezolid							✓	✓	✓	✓	✓				✓	✓
LOM	Lomefloxacin																
MERO	Meropenem	✓	✓	✓	✓		✓					✓	✓				
MEV	Meropenem/vaborbactam		✓														
MRD	Metronidazole												✓				
MEZ	Mezlocillin																
MF	Micafungin													✓	✓		
MIN	Minocycline	✓														✓	
MXF	Moxifloxacin							✓			✓		✓			✓	✓
MUP	Mupirocin							✓									
NIT	Nitrofurantoin								✓								
NOR	Norfloxacin								✓	✓							
OFL	Ofloxacin														✓		
OMC	Omadacycline																
ORI	Oritavancin																
OXA+	Oxacillin + 2% NaCl									✓							
PAS	Para-aminosalicylic acid														✓		
PEN	Penicillin										✓	✓	✓				
PIP	Piperacillin														✓		
P/T4	Piperacillin / Tazobactam	✓	✓	✓	✓		✓										
PLZ	Plazomicin																
POL	Polymyxin B*	✓					✓										
PZ	Posaconazole													✓	✓		
SYN	Quinupristin/dalfopristin								✓								
RFB	Rifabutin														✓	✓	
RIF	Rifampin								✓		✓				✓	✓	
SPA	Sparfloxacin											✓					
STR	Streptomycin								✓						✓	✓	
FIS	Sulfisoxazole																
TZD	Tedizolid									✓							
TEI	Teicoplanin								✓	✓	✓						
TLV	Telavancin								✓								
TLC	Telavancin w/Tween mimic																
TRM	Temocillin																
TET	Tetracycline								✓			✓	✓	✓			

## Thermo Scientific Sensititre Standard Formularies – Clinical

		Antimicrobial		Gram negative First line		Gram negative Second line		Non- fermenters		Gram positive		Fastidious		Anaerobes		Yeast		Mycobacteria	
Code	Antimicrobial	EUGNF	EUGNF	EUMDRXXF	EUMDRXXF	DKMGN	EURGNOL	EUX2NF	EUSTA/PF	FR1STENT	HPB1	STP6F	ANAMER03	Y010	ITAMYUCC	MYCOTBI	RAPMYCOI	SL/OMYC01	
TIC	Ticarcillin																		
TIM2	Ticarcillin/Clavulanic Acid	✓																✓	
TGC	Tigecycline	✓	✓	✓	✓			✓		✓								✓	
TOB	Tobramycin	✓	✓	✓	✓			✓		✓								✓	
TMP	Trimethoprim																		
SXT	Trimethoprim / Sulfamethoxazole	✓		✓				✓		✓	✓	✓						✓	
VAN	Vancomycin										✓	✓		✓					
VOR	Voriconazole													✓	✓				

## Thermo Scientific Sensititre Standard Formularies – Veterinary

		Companion		Bovine/ porcine		Avian	Equine	Urine (all)	Bovine (masti- tis)	Topical (all)			Companion		Bovine/ porcine		Avian	Equine	Urine (all)	Bovine (masti- tis)	Topical (all)		
Code	Antimicrobial	Gram negative	Gram positive	COMPGN1F	COMPGP1F	COMPGN1F	COMPGP1F	COMPGN1F	COMPGP1F	JOVE2	COMPGN1F	COMPGP1F	COMPGN1F	COMPGP1F	COMPGN1F	COMPGP1F	COMPGN1F	COMPGP1F	CMV1/AMAF	CMV1/BURF	CMV1/AMAF	CMV1/BURF	JOVE2
AMI	Amikacin	✓	✓					✓															✓
AMOX	Amoxicillin							✓															
AUG2	Amoxicillin/ Clavulanic Acid 2:1	✓	✓							✓													✓
AMP	Ampicillin	✓	✓	✓	✓	✓		✓	✓	✓													
BAC	Bacitracin																						✓
FAZ	Cefazolin	✓	✓							✓													✓
FEP	Cefepime																						
FOT	Cefotaxime									✓													
FOV	Cefovecin	✓	✓																				
FOX	Cefoxitin																						
POD	Cefpodoxime	✓	✓																				
TAZ	Ceftazidime	✓								✓													
XNL	Ceftiofur					✓	✓	✓	✓	✓						✓	✓						
LEX	Cephalexin	✓																					
CEP	Cephalothin		✓																				
CHL	Chloram- phenicol	✓	✓							✓													✓
CTC	Chlortetracy- cline				✓																		
CIP	Ciprofloxacin																						
CLA	Clarithromycin									✓													
CLI	Clindamycin		✓	✓	✓	✓	✓																
DANO	Danofloxacin					✓	✓																
DOX	Doxycycline	✓	✓																				✓
ENRO	Enrofloxacin	✓	✓	✓	✓	✓	✓	✓	✓	✓													
ERY	Erythromycin									✓													
FFN	Florfenicol						✓	✓	✓														
GEN	Gentamicin	✓	✓	✓	✓	✓	✓	✓	✓	✓													
IMI	Imipenem	✓	✓																				
MAR	Marbofloxacin	✓	✓																				
MIN	Minocycline																						
MXF	Moxifloxacin																						

## Thermo Scientific Sensititre Standard Formularies – Surveillance

Code	Antimicrobial	Europe					NARMS				
		Gram negative		Gram positive		Campylobacter	Gram negative		Gram positive		Campylobacter
		EUVSEC3	EUVSEC2	EUVENC	EUST2	EUCAMP3	CMM5AGNF	CMM4AGNF	CMM3AGNF	CMM3AGP	CMM4AGP
AMI	Amikacin	✓									
AUG2	Amoxicillin/Clavulanic Acid 2:1						✓	✓	✓		
AMP	Ampicillin	✓		✓			✓	✓	✓	✓	
AVL	Avilamycin									✓	
AZI	Azithromycin	✓					✓	✓	✓		✓
FEP	Cefepime		✓								
FOT	Cefotaxime	✓	✓								
F/C	Cefotaxime/Clavulanic acid		✓								
FOX	Cefoxitin		✓		✓		✓	✓	✓		
TAZ	Ceftazidime	✓	✓								
T/C	Ceftazidime/Clavulanic acid		✓								
CEF	Ceftiofur								✓		
AXO	Ceftriaxone						✓	✓	✓		
CHL	Chloramphenicol	✓		✓	✓	✓	✓	✓	✓	✓	
CIP	Ciprofloxacin	✓		✓	✓	✓	✓	✓	✓	✓	✓
CLI	Clindamycin				✓						✓
COL	Colistin	✓					✓				
DAP	Daptomycin			✓					✓	✓	
ETP	Ertapenem		✓			✓					
ERY	Erythromycin			✓	✓	✓			✓	✓	✓
FFN	Florfenicol										✓
FUS	Fusidate				✓						
GEN	Gentamicin	✓		✓	✓	✓	✓	✓	✓	✓	✓
IMI	Imipenem		✓								
KAN	Kanamycin				✓				✓		
LZD	Linezolid			✓	✓				✓	✓	
LIN	Lincomycin								✓		
MERO	Meropenem	✓	✓				✓	✓			✓
MUP	Mupirocin				✓						
NAL	Nalidixic acid	✓					✓	✓	✓		✓
NIT	Nitrofurantoin								✓	✓	
PEN	Penicillin				✓				✓		
SYN	Quinupristin/Dalfopristin			✓	✓				✓	✓	
RIF	Rifampin				✓						
STR	Streptomycin				✓		✓	✓	✓	✓	
SMX	Sulfamethoxazole	✓			✓						
FIS	Sulfisoxazole						✓	✓	✓		
TEI	Teicoplanin	✓									
TRM	Temocillin		✓								
TET	Tetracycline	✓		✓	✓	✓	✓	✓	✓	✓	✓
TIA	Tiamulin				✓						
TGC	Tigecycline	✓		✓					✓	✓	
TMP	Trimethoprim	✓			✓						
SXT	Trimethoprim / Sulfamethoxazole						✓	✓	✓		
TYLT	Tylosin tartrate								✓		
VAN	Vancomycin			✓	✓				✓	✓	

\*Enterobacteriaceae, Acinetobacter lwoffii, Streptococcus species and *S.aureus* (MSSA) only. \*\*Enterococcus testing only. \*\*\**Staphylococcus aureus* testing only. \*\*\*\**Staphylococcus* spp. testing only.

Thermo Fisher Scientific products are distributed globally so uses, applications, and availability of product in each country depend on local regulatory marketing authorization status.

## Ordering information

Description	Quantity	Product No
<b>Sensititre Instruments</b>		
Nephelometer	Each	V3011*
Sensititre AIM Instrument	Each	V3020*
ARIS HiQ Instrument	Each	V4000*
Vizion Instrument	Each	V2021*
OptiRead Instrument	Each	V3030*
SWIN PC Global Kit	Each	SW4000GBL
SWIN Software Epidemiology Module	Each	SW1203
SWIN PC Printer	Each	SW4000PRN
LED-LCD Multi TOUCH Monitor	Each	SW1305
Manual Viewbox	Each	V4007
Electronic Multichannel Pipette	Each	V4009
<b>Sensititre Broths</b>		
Demineralized Water	5 mL/box of 10	T3339-10*
	5 mL/box of 100	T3339*
HTM Broth	11 mL/box of 10	T3470
Middlebrook 7H9 with OADC	11 mL/box of 10	T3441*
Mueller-Hinton Broth with Lysed Horseblood	11 mL/box of 10	CP11410*
	11 mL/box of 10	CP112-10*
Mueller-Hinton Broth with OADC	11 mL/box of 10	T8006*
	5 mL/box of 10	T34620510*
Mueller-Hinton Broth with TES	5 mL/box of 100	T3462-05*
	11 mL/box of 10	T3462-10*
	11 mL/box of 100	T3462*
Saline Tween with Glass Beads	5 mL/box of 10	T3491*
Supplemented Brucella Broth	11 mL/box of 10	T3450*
Veterinary Fastidious MHF Medium (MHF-Y)	11 mL/box of 10	T3461
YeastOne Broth	11 mL/box of 10	Y3462*
<b>Sensititre Accessories</b>		
0.5 McFarland Standard	Each	E1041
Adhesive seals for anaerobic plates - perforated	10/pack	G522E
Adhesive seals for AST plates	10/pack	G520N
Doseheads	100/box	E3010
Pipetting Reservoirs	200/box	E1032

\* IVD-CE labelled.

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## Notes

## Notes



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