

# ANTIMICROBIAL RESISTANCE



**HARDY**  
DIAGNOSTICS

*A Culture of Service™*

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Antimicrobial resistance is among the top ten global health threats facing humanity, killing at least 1.27 million people worldwide. In the U.S., more than 3 million infections occur each year, resulting in 48,000 deaths.

## **HARDY DIAGNOSTICS**

is committed to **CREATING**  
**INNOVATIVE SOLUTIONS** designed  
to combat this growing threat.

Hardy Diagnostics has curated a complete line of products for the fight against AMR, so that together, we might **PARTNER** to **DIAGNOSE** and **PREVENT** disease.

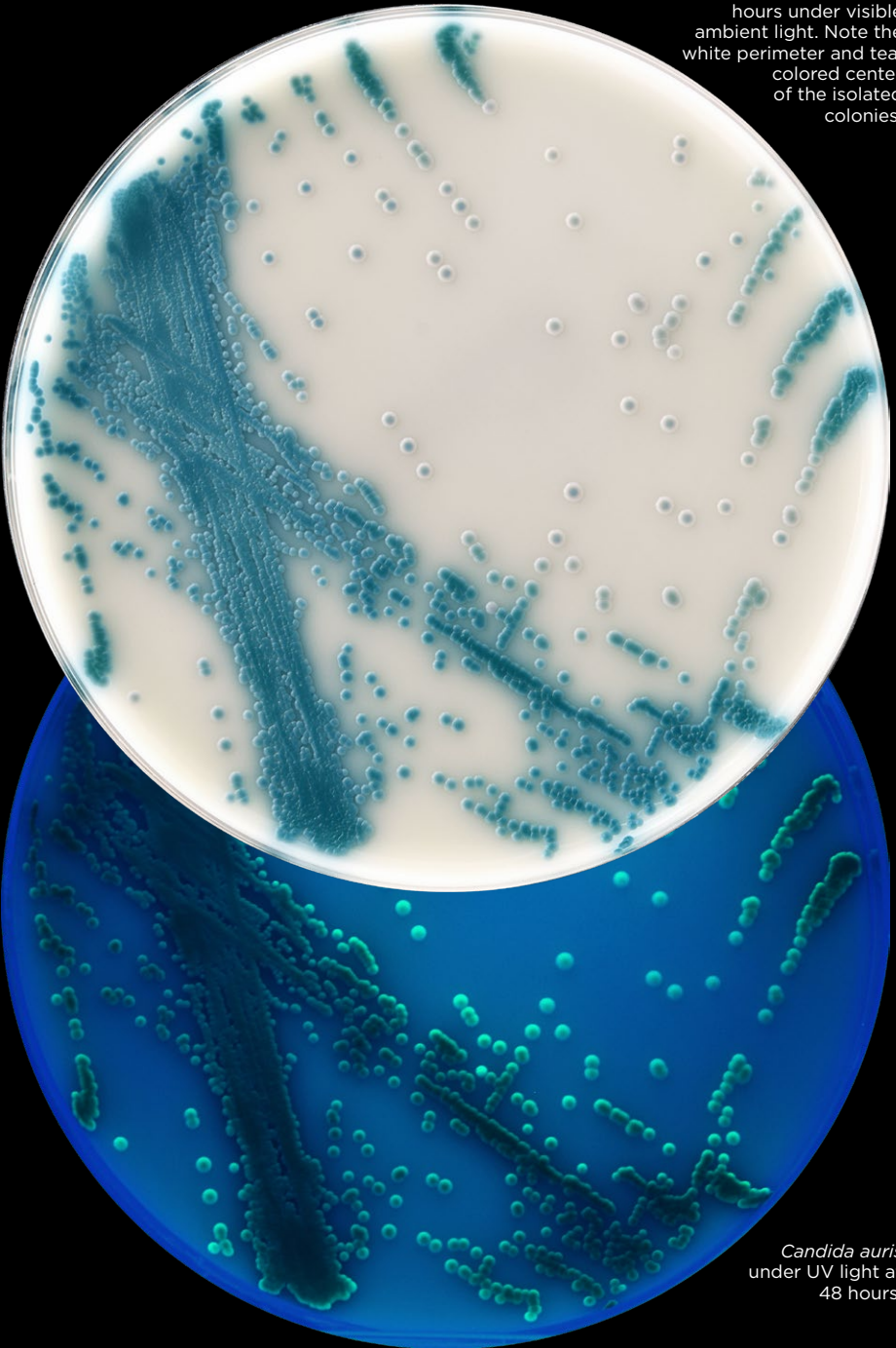


# Candida + auris

**For the selective isolation and differential identification of Candida species**

Colonies of *C. auris* will appear white with a characteristic teal to teal-green “bullseye” center and show a unique fluorogenic reaction under UV light at 48-72 hours. *C. auris* is unique amongst other Candida species because it causes outbreaks and is resistant to nearly all antifungal drugs. This pathogen is also difficult to identify and thus can be misidentified as other species of yeasts. This medium also allows for the differentiation of *C. tropicalis*, *C. albicans* and *C. krusei*, and can aid in the identification of *C. glabrata* when used in conjunction with Rapid Trehalose Broth or GlabrataQuick<sup>TM</sup>. All colonies suspected of *C. auris* should be subjected to confirmatory methods such as MALDI.

*Candida auris* at 48 hours under visible ambient light. Note the white perimeter and teal colored center of the isolated colonies.



*Candida auris*  
under UV light at  
48 hours.

Cat. no. G343

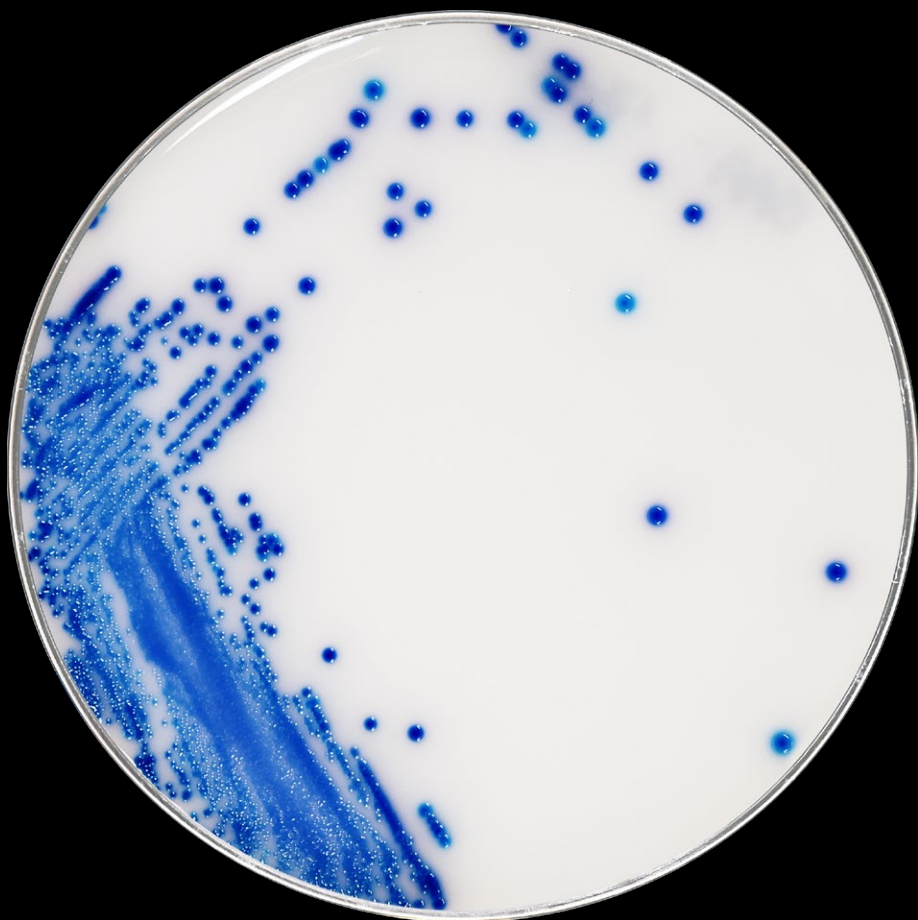
# HardyCHROM™

## CRE

**For the screening of**  
*E. coli*, *K. pneumoniae*,  
*K. aerogenes*, *K. oxytoca*,  
*E. cloacae* complex, and  
*S. marcescens*

**HardyCHROM™ CRE** is a selective and differential chromogenic agar medium intended for the qualitative and presumptive detection from stool specimens of *Escherichia coli* that are non-susceptible to carbapenems as pink colonies and KES (*Klebsiella aerogenes*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Enterobacter cloacae* complex, and *Serratia marcescens*) that are non-susceptible to carbapenems as blue colonies.

**HardyCHROM™ CRE** is intended as an aid in the detection, identification of colonization and control of these bacteria in a healthcare setting. **HardyCHROM™ CRE** is not intended to diagnose infection or guide therapy. Results can be interpreted after incubation for 18-24 hours. Subculture to non-selective medium is required for confirming identification, antimicrobial susceptibility testing and epidemiological typing.



Cat. no. G323





# HardyCHROM™

## ESBL

**The first selective and differential chromogenic media for ESBL in the United States!**

**HardyCHROM™ ESBL** is a selective and differential chromogenic medium which is intended for the qualitative and presumptive detection from stool specimens of:

Enterobacteriales that are potentially non-susceptible to ceftazidime and cefpodoxime.

Extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli*, *Klebsiella pneumoniae* and *Klebsiella oxytoca*.

- Results in as little as 18 hours
- Easy-to-read color development
- *Escherichia coli* produce pink colonies
- *Proteus mirabilis* produce yellow/gold colonies
- *Klebsiella pneumoniae* or *Klebsiella oxytoca* produce blue colonies





Cat. no. G321



Hardy**CHROM**<sup>TM</sup>

# MRSA

**A selective and differential chromogenic medium for the qualitative direct detection of nasal colonization by methicillin-resistant *S. aureus* (MRSA)**

This new chromogenic medium simplifies the identification of MRSA infections. MRSA strains grown in the presence of chromogenic substrates produce deep pink to magenta colonies.

- Distinct color change read-out
- Bright color development
- Compatible with automation
- Read-out at 24 hours
- Easy-to-read



Cat. no. G307



**HARDYDISKS**

**As pathogens evolve,  
so do we.**

**Hardy Diagnostics offers an  
extensive selection of antibiotic  
sensitivity disks for the Kirby-  
Bauer disk diffusion test**

Hardy Diagnostics is always expanding our HardyDisk™ AST line. Since 2017, we have introduced ten new FDA cleared HardyDisks™:

Ceftazidime/Avibactam (CZA50) - Avycaz  
Ceftolozane/Tazobactam (C/T40) - Zerbaxa  
Delafloxacin (DLX5) - Baxdela  
Meropenem/Vaborbactam (MEV30) - Vabomere  
Plazomicin (PLZ30) - Zemdri  
Eravacycline (TP434) - Xerava  
Omadacycline (OMC30) - Nuzyra  
Cefiderocol (FDC30) - Fetroja  
Lefamulin (LMU20) - Xenleta  
Imipenem/Relebactam (IMR 35) - Recarbrio



NG-Test®

# CARBA 5

Clear results help to guide therapy as we combat the world's deadliest forces.

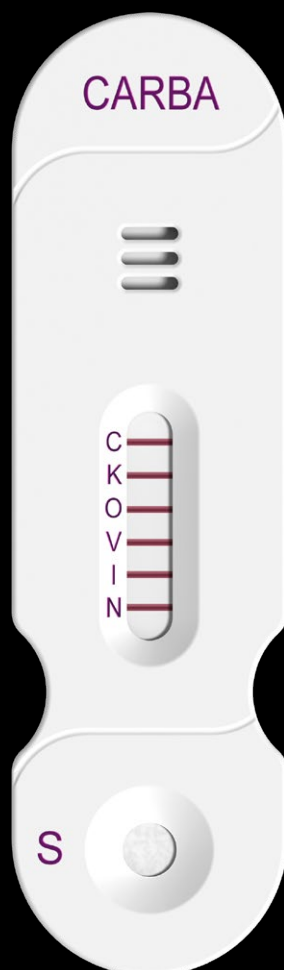
**NG-Test® CARBA 5** is a lateral flow assay for quick, clear detection of the “big 5” carbapenemase enzymes produced by *Enterobacterales* and *P. aeruginosa*

## Cost effective

The cost per test versus PCR makes it extremely economical.

## Easy to implement

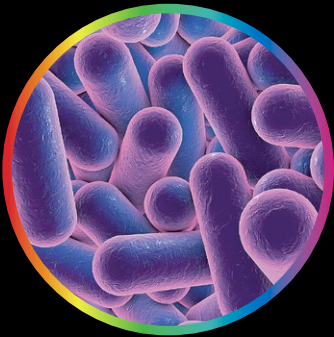
NG-Test® CARBA 5 naturally fits into your workflows and requires no specialized training, unlike molecular tests.



Cat. no. CARBA5

## End the guess work

With NG-Test® CARBA 5, you don't need to guess. Simply perform the test from bacterial culture and in **15 minutes** you'll save more than money; **you'll be saving lives.**



## Accuracy is everything

PCR tests will detect the gene, but is the gene expressed? That's what counts. NG-Test® CARBA 5 provides rapid detection of resistant phenotypes which allows you to fast-track infection control measures with accuracy.



## Nothing matters more

Patient care is the highest priority when dealing with infection control and resistant bacteria. Every minute spent searching is a minute delaying accurate treatment.





## **NG-Test® CARBA 5: A truly unique, cost-effective assay for patient screening.**

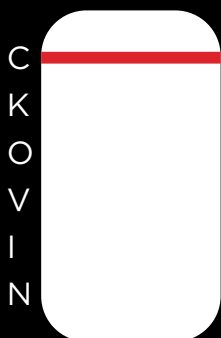
The only rapid, multiplex, phenotypic test capable of detecting KPC, OXA-48-like, VIM, IMP, and NDM carbapenemases produced by Enterobacterales and *P. aeruginosa*.

**The CDC regards the emergence of carbapenem-resistant Enterobacterales (CRE) as an urgent threat, requiring immediate action.**

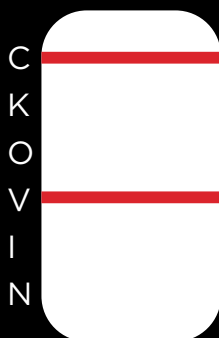
Reference: <https://www.cdc.gov/drugresistance/pdf/threats-report/CRE-508.pdf>

# A “LINE” means an ENZYME!

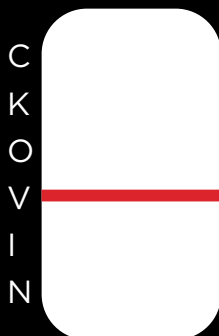
Example of interpretation



**Negative**

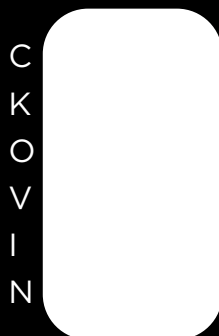


**VIM Positive**



**INVALID**

No control line



**INVALID**

No control line

**Find what you're looking for more quickly than ever before.**

NG-Test®

# CTX-M MULTI

Detection of CTX-M Extended  
Spectrum Beta-lactamases  
groups 1, 2, 8, 9 & 25

**RAPID**

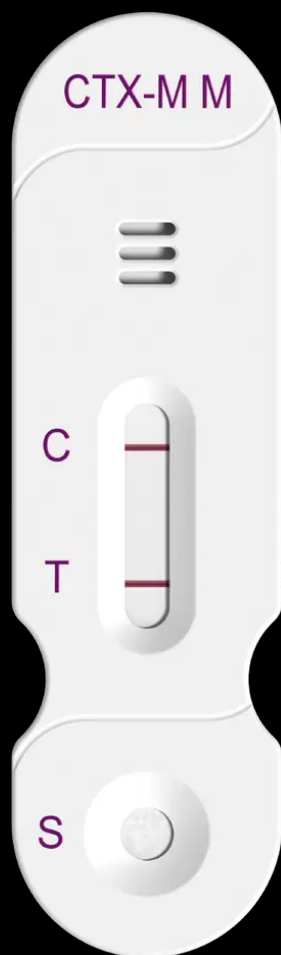
- Results in 15 minutes from-bacterial culture

**ACCURATE**

- Excellent correlation with PCR
- Evaluations available

**USER  
FRIENDLY**

- Minimal training needs
- No equipment needed
- No maintenance costs
- Stable at room temperature



For Research Use Only

Cat. no. NGBCTMS23000

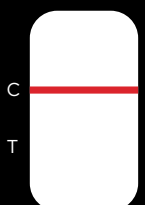
NG-Test®

# MCR-1

## An Emerging Threat

The *mcr-1*, *mcr-2* and *mcr-3* genes cause resistance to colistin, a last-resort antibiotic used for treating resistant infections. Colistin is considered a last-resort antibiotic because while it can be used to treat patients with infections that have already developed resistance to other antibiotics it can have serious side effects. (Source: CDC).

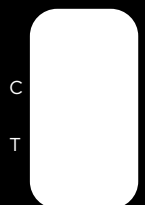
Example of interpretation



**Negative**



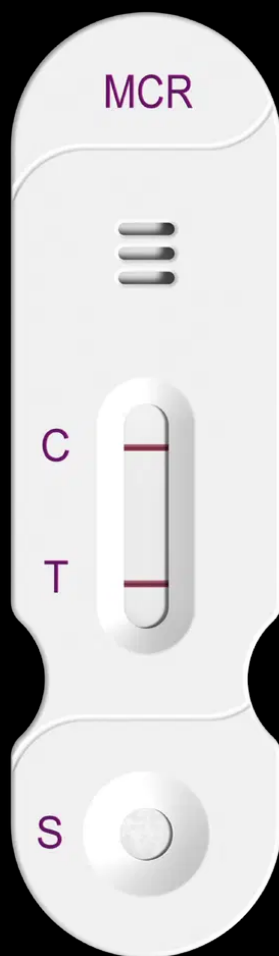
**Positive**



**INVALID**



**INVALID**



For Research Use Only

Cat. no. NGBMCRS23000



FM 572526

Hardy Diagnostics has a Quality Management System that is certified to ISO 13485 and is a FDA licensed medical device manufacturer.

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