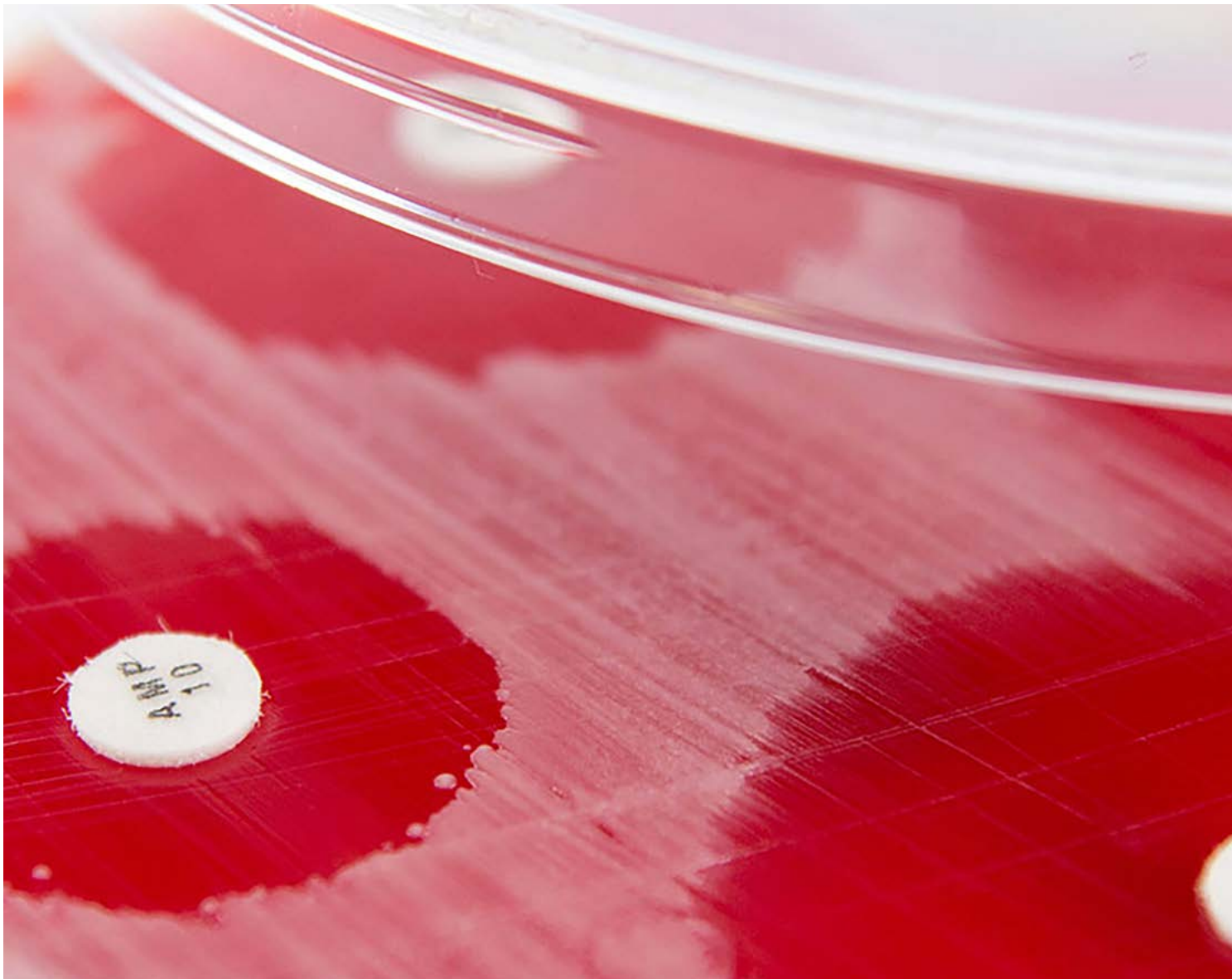
BIOMAXIMA®

Antimicrobial Susceptibility Testing

Receive Maximum from Diagnostics



Antimicrobial Susceptibility — Testing Solutions

Antimicrobial susceptibility testing (AST) is a critical component in clinical microbiology, aimed at determining the efficacy of antibiotics against specific pathogens.

BioMaxima's comprehensive product portfolio includes everything necessary for the susceptibility testing of pathogenic microorganisms:

- antimicrobial paper discs
- gradient strips (the latest addition to our product line!)
- culture media for the susceptibility testing of aerobic and anaerobic bacteria, yeasts and fungi
- chromogenic media for resistance mechanisms detection
- reference strains

Antimicrobial Paper Discs

Biomaxima's antibiotic discs are trusted by laboratories worldwide for their precision and reliability in antimicrobial susceptibility testing and bacterial differentiation. Produced in a state-of-the-art manufacturing environment, ensure consistent, high-quality results essential for accurate diagnostics. Biomaxima proudly supplies these discs globally, meeting diverse diagnostic needs with a commitment to excellence and rigorous quality control - making them a preferred choice for microbiology professionals.

BIOMAXIMA PAPER DISCS

The Kirby-Bauer disc diffusion method is a well-established technique for antimicrobial susceptibility testing that is fundamental in guiding antibiotic therapy and addressing antimicrobial resistance. This method is standardized by the Clinical and Laboratory Standards Institute (CLSI) and the European Committee on Antimicrobial Susceptibility Testing (EUCAST), ensuring consistent and comparable results across laboratories worldwide. BioMaxima discs are manufactured in strict adherence to the EUCAST/CLSI standards and relevant quality guidelines, ensuring high accuracy and reproducibility of the AST results.

We offer discs not only for antimicrobial and antifungal susceptibility testing, but also for other disc diffusion techniques. Our diagnostic discs, impregnated with antibiotics or other active substances, are also suitable for bacterial differentiation and presumptive identification.

ASTD (Antimicrobial Susceptibility Test Discs)	AFSTD (Antifungal Susceptibility Test Discs)	DTD (Diagnostic Test Discs)	Discs Dispenser
Discs are securely packaged in humidity-proof blister packs, available in two options: a single blister pack containing 50 discs with desiccant, or a carton box containing five blister packs, each with 50 discs.			Dispenses six antibiotic disc cartridges, ensuring precise spacing between discs for optimal testing. Designed to apply six discs on a 90 mm petri dish.
Amikacin 10	Amphotericin B 20	Bacitracin 0,1	
Amikacin 30	Amphotericin B 100	Bacitracin 0,04	
Amoxycillin 10	Clotrimazol 10	BV Factor	
Amoxycillin 25	Econazol 10	BVX Factor	
Amoxycillin 30	Fluconazol 10	BX Factor	
Amoxycillin/Clavulan acid 2/1	Fluconazol 25	Furazolidon 100	
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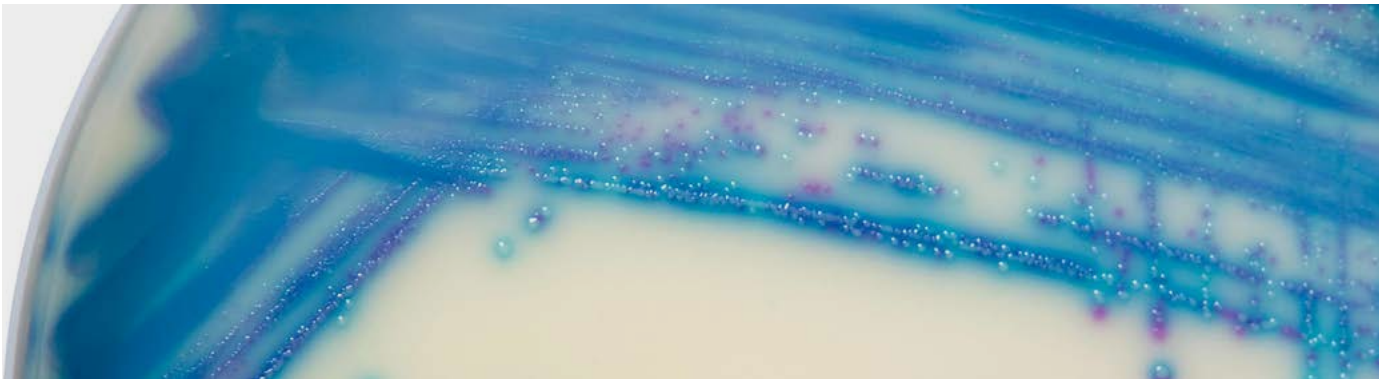
A full list is available at **BIOMAXIMA.COM**

Culture media for susceptibility testing

BioMaxima offers a wide range of media for AST, in both basic versions and with the most typical additives. Our media are being made from the best ingredients while maintaining the the highest production standards, in a modern factory in Lublin, and are carefully quality-controlled to meet CLSI and EUCAST recommendations. We supply media in round and square plates of various sizes.

The most commonly used media for AST include Mueller-Hinton Agar (MHA), which is standardized for both bacterial cultivation and antibiotic diffusion, making it ideal for the Kirby-Bauer disc diffusion method. MHA has defined cation levels and neutral pH to ensure reproducibility and reliable results across laboratories. For certain organisms, such as fastidious bacteria (e.g., *Streptococcus pneumoniae*), supplements (like blood or NAD) are added to MHA to enhance growth conditions without affecting the diffusion properties of antibiotics.

Item no.	Name	Description	Packaging
PP 1170	Mueller Hinton 2 LAB-AGAR™	MHA medium with controlled cation levels and neutral pH, standardized for cultivation and antimicrobial susceptibility testing of bacteria	10 plates (ø 90 mm)
PP 0033			5 plates (ø 120 mm)
PP 0016			5 plates (ø 140 mm)
PP 0016K			5 plates (square 120 mm)
PP 0083	Mueller Hinton 2 LAB-AGAR™ + NAD + 5% HB	MH-F medium, enriched with defibrinated horse blood and β-NAD, standardized for cultivation and antimicrobial susceptibility testing of fastidious microorganisms with specific nutritional requirements	10 plates (ø 90 mm)
PP 0092			5 plates (ø 140 mm)
PP 1172	Mueller Hinton 2 LAB-AGAR™ + 5% SB	MH medium, enriched with defibrinated sheep blood, standardized for cultivation and antimicrobial susceptibility testing of fastidious microorganisms with specific nutritional requirements	10 plates (ø 90 mm)
PP 0018			5 plates (ø 140 mm)
PP 0105	Mueller Hinton 2 LAB-AGAR™ + Glucose + Methylene Blue	Recommended for antifungal susceptibility testing of discs	10 plates (ø 90 mm)
PP 0270	Fastidious Anaerobe LAB-AGAR™	Medium for the cultivation and antimicrobial susceptibility testing of anaerobic bacteria	10 plates (ø 90 mm)
PP 0271			5 plates (ø 120 mm)
PP 0272			5 plates (ø 140 mm)
PP 0082	Brucella LAB-AGAR™ + 5% SB	Brucella agar with sheep blood and vit. K, for the cultivation and antimicrobial susceptibility testing of *Brucella spp.*	10 plates (ø 90 mm)
PP 0095	RPMI MOPS LAB-AGAR™	Specialized medium recommended for quantitative antifungal susceptibility testing using antibiotic gradient strips. This medium supports the reliable growth of a variety of fungal pathogens, particularly yeast species, under controlled pH and nutrient conditions.	10 plates (ø 90 mm)
PP 0124			5 plates (ø 140 mm)
PP 0218	Mueller Hinton 2 LAB-AGAR™ + 4% NaCl	Recommended for use in screening *Staphylococcus aureus* for antibiotic susceptibility testing	10 plates (ø 90 mm)
PP 0077	Mueller Hinton 2 LAB-AGAR™ + 2% NaCl	Recommended for use with antibiotic gradient strips for the quantitative determination of susceptibility to methicillin and oxacillin	10 plates (ø 90 mm)
PP 0006	Mueller Hinton 2 LAB-AGAR™ + 4% NaCl + Oxacillin	For the detection of methicillin resistant *Staphylococcus aureus*	10 plates (ø 90 mm)
PP 0073	Mueller Hinton 2 LAB-AGAR™ + Cloxacillin	Medium supplemented with cloxacillin is designed for the confirmation of *Enterobacterales* strains potentially producing Extended-Spectrum ß-Lactamase (ESBL)	10 plates (ø 90 mm)



Chromogenic media for resistance mechanisms detection

Choose Biomaxima's chromogenic media and discover how easy and effective laboratory work can be! Chromogenic media can provide results within 18-24 hours, much faster than traditional biochemical tests or susceptibility testing. The visual distinction of resistant colonies reduces the need for further sub-culturing or complex tests. High specificity and sensitivity of detection of the resistant strains improves the accuracy of diagnosis.

Item no.	Name	Description	Packaging
PP 0139	Chromogenic Acinetobacter MDR LAB-AGAR™	This highly selective medium promotes the growth of *Acinetobacter* in conspicuously red colonies after overnight incubation. It is designed for the qualitative detection of *Acinetobacter* colonization to help prevent and control drug-susceptible and multi-drug resistant (MDR) strains in healthcare settings.	10 plates
PP 0202	Chromogenic C3GR LAB-AGAR™	This selective and differential chromogenic culture medium is designed for the qualitative detection of third-generation cephalosporin-resistant Enterobacterales (C3GR-E) colonization.	10 plates
PP 0239	Chromogenic COL-APSE LAB-AGAR™	This medium is intended for the qualitative direct detection of gastrointestinal colonization by colistin-resistant Gram-negative bacteria (COL-R) to aid in the prevention and control of COL-R in healthcare settings.	10 plates
PP 0155	Chromogenic ESBL Mod. LAB-AGAR™	This medium enables the detection of ESBL-producing bacteria while inhibiting most AmpC-type resistant bacteria. This is crucial, as intrinsic AmpC resistance is less epidemiologically relevant and can cause false positives for ESBL in traditional testing methods.	10 plates
PP 0157	Chromogenic KPC Mod. LAB-AGAR™	Intended for use in the qualitative direct detection of gastrointestinal colonization with carbapenem-resistant Enterobacteria (CRE).	10 plates
PP 0043	Chromogenic MRSA Modified LAB-AGAR™	A selective and differential chromogenic medium for the qualitative direct detection of colonization by methicillin resistant *Staphylococcus aureus* (MRSA).	10 plates
PP 0198	Chromogenic Super Carba LAB-AGAR™	This selective and differential chromogenic culture medium is designed for the qualitative direct detection of gastrointestinal colonization by carbapenem-resistant Enterobacterales (CRE), including OXA-48 producers.	10 plates
PP 0074	Chromogenic VRE LAB-AGAR™	Intended for use in the qualitative direct detection of vanA/vanB transmissible VRE-type gastrointestinal colonization with vancomycin-resistant *Enterococcus faecium* and *Enterococcus faecalis* (VRE)	10 plates

Reference strains for quality control

Our offer also includes first passage reference strains, which are useful for quality control, and posess predictable and repeatable morphological and biochemical characteristics. Selectrol® is the first generation microorganisms in the form of freeze-dried discs, available in vials of 5, 10 or 25 pieces.

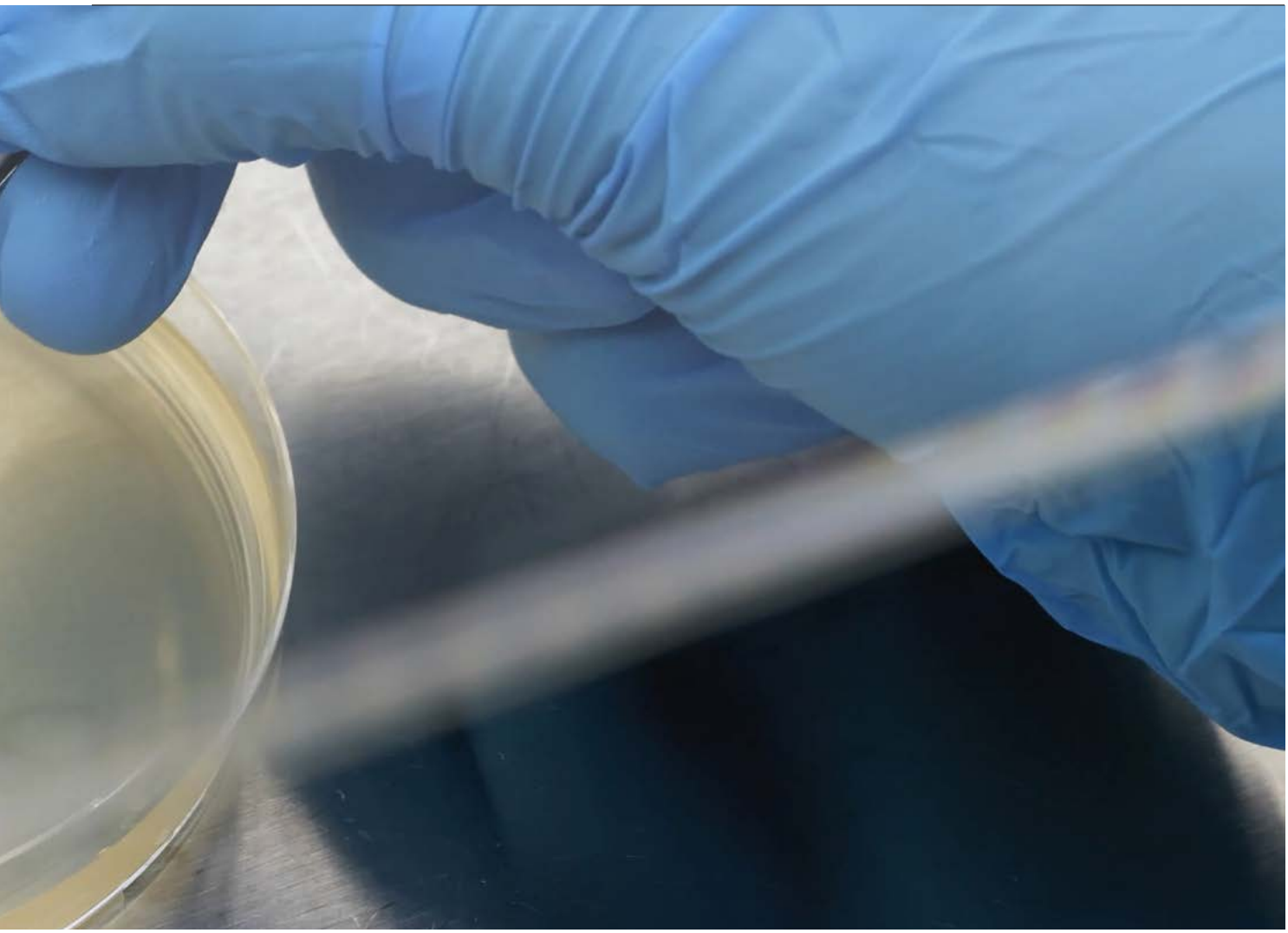
A full list of reference strains is available at **BIOMAXIMA.COM**

Protect Antibiotic Effectiveness

Our innovative strips are produced using BioMaxima proprietary technology. Made from special composite material, newly designed strips feature an antibiotic gradient applied through an advanced method. We produce a comprehensive portfolio of high-quality MIC products that comply with EUCAST and CLSI requirements. Use BioMaxima strips and help to mitigate antibiotic resistance spread.

FOUR STRIPS, FOUR APPLICATIONS

We offer four types of gradient test strips for determining the minimum antibiotic inhibitory concentration (MIC), each designed to identify the minimum concentration of their respective agents that inhibits the growth of microorganisms: the BMIC™ test for determining the antibacterial MIC, the FMIC™ test for antifungal MIC, the RMIC™ test for detecting resistance mechanisms through MIC, and the TMIC™ test for antituberculosis minimum inhibitory concentration. The full range of products is planned for release in 2025. Samples are already available upon request.



BioMaxima MIC test strips — use the right tools for the job

- The innovative design protects the high consistency and stability of antibiotic gradient along the strip surface
- Reduced risk of gas collecting under the strip's surface and reduced risk of water condensation, which could otherwise affect proper antibiotic distribution
- Very good adhesion to the agar surface
- Timely and consistent antibiotic release - highly reproducible test results
- Clear and well-marked scale makes the reading easy and convenient
- Individually packed strips in sachets made of special foil with a individual moisture absorber
- Available in boxes of 5, 10 or 30 pieces

A full list of BMIC/FMIC/RMIC/TMIC is available at **BIOMAXIMA.COM**

BIOMAXIMA®

BioMaxima is a Polish manufacturer of microbiological media, reagents and specialized equipment for in vitro diagnostics. Our company is listed on the Warsaw Stock Exchange. With over a quarter of a century of experience in the clinical and industrial microbiology, we provide customers with the highest quality products, manufactured from substrates and components sourced from reliable suppliers only.

The year 2023 was exceptional in the company's history, as second, highly automated modern factory was built in Lublin, dramatically increasing BioMaxima's production, storage and logistics capabilities. Our offer has also expanded to include products and diagnostic systems that integrate microbiology and molecular biology.

Clinical microbiology is one of the most important areas of BioMaxima's activity. Year by year, we invest increasingly in research and development activities and continually expand our portfolio of products. We export tests and reagents to 65 countries, and we are developing dynamically.

IF YOU WANT TO KNOW MORE, PLEASE CONTACT:

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