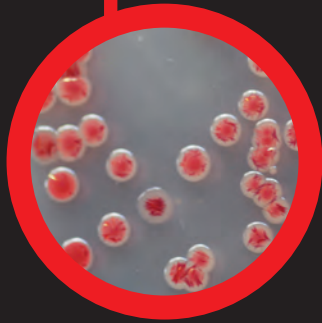


● **Intense Colours**



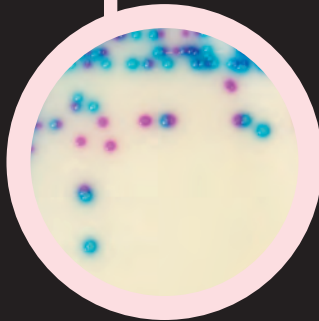
Salmonella
Listeria

● **Cost Efficient**



ESBL
KPC

● **Fast Results**

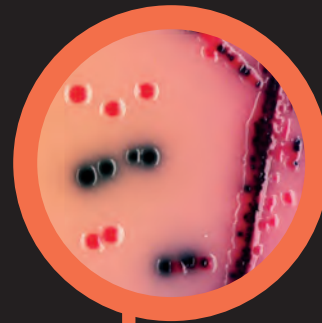


E.coli
E.coli O157

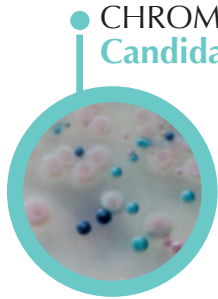
S.aureus
MRSA

VRE
Pseudomonas

● **Dehydrated Media**



The Widest Range of Chromogenic Media
For Colourful Microbial Detection



Product code:
CA222: 5 L pack
CA223-25: 25 L pack

CHROMagar™ Candida

Plate Reading

- *Candida albicans*
--> Green
- *Candida tropicalis*
--> Metallic blue
- *Candida krusei*
--> Pink, fuzzy

For isolation and differentiation
of major clinical-significant *Candida* species

99% Sensitivity/Specificity^[1]

Yeasts are increasingly important pathogens, particularly for immuno-depressed people such as the elderly, AIDS victims, etc. CHROMagar™ *Candida* will not only allow the growth and detection of yeasts (like traditional media Sabouraud Agar) but **will also instantly allow you to differentiate various *Candida* species** solely by the colour of the colony. CHROMagar™ *Candida* allows a powerful and easy detection of mixed yeast cultures and in some cases it can detect antifungal resistant strains present in the samples even as a minor population.



Product code
TA672: 5 L pack

CHROMagar™ Staph aureus

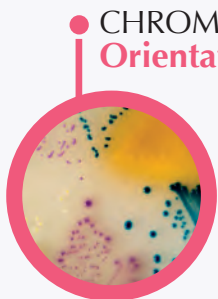
Plate Reading

- *Staphylococcus aureus*
--> Pink to mauve
- Other bacteria
--> Colourless, blue or inhibited

For isolation and direct differentiation of
Staphylococcus aureus

95,5% Sensitivity / 99,4% Specificity^[2]

Staphylococcus aureus is a major pathogenic bacterium found in the clinical field and in food industry. Nosocomial infections due to *S.aureus* create an increasing number of problems, so it is essential to accurately and rapidly detect *S. aureus*. Mannitol fermentation based traditional media lead to many false positive and false negative. CHROMagar™ *Staph aureus* has **unrivalled sensitivity and specificity** for detecting *S. aureus* after 24 hours. This obviates the need for many useless catalase and latex agglutination tests on non-*S. aureus* strains.



Product code
RT412: 5 L pack
RT413-25: 25 L pack

CHROMagar™ Orientation

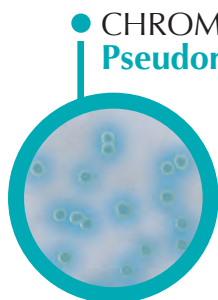
Plate Reading

- *E. coli*
--> Dark pink to reddish
- *Enterococcus*
--> Turquoise blue
- *Proteus*
--> Brown halo
- *Klebsiella, Enterobacter*
--> Metallic blue
- *S. aureus*
--> Golden, opaque, small
- *Citrobacter*
--> Metallic blue with red halo
- *S.saprophyticus*
--> Pink, opaque, small

For isolation and differentiation
of urinary tract pathogens

99,3% Sensitivity for *E. coli*^[3]

The major target of this medium is the detection of urinary tract pathogens with *E. coli* as red colonies, *Klebsiella* as metallic blue colonies, *P. mirabilis* as clear with brown halo colonies etc. However, CHROMagar™ *Orientation* has a broader application as a general nutrient agar for the isolation of various microorganisms. For instance, CHROMagar™ *Orientation* can be used to differentiate various microorganisms in other infected areas; e.g. scars. CHROMagar™ *Orientation* is **useful when supplemented with various antibiotics in detecting increasingly important nosocomial and multiple resistant microorganisms.**



Product code
PS822: 5 L pack

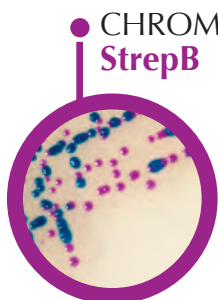
CHROMagar™ Pseudomonas

Plate Reading

- *Pseudomonas* including
P. aeruginosa
--> blue green
- Other microorganisms
--> colourless, or inhibited.

For isolation and detection of *Pseudomonas* species

Pseudomonas is an emerging opportunistic pathogen of clinical relevance because of its occurrence in nosocomial infections. Also, epidemiology studies indicate that antibiotic resistance is increasing in clinical isolates. CHROMagar™ *Pseudomonas* delivers **rapid and clear results** for detection of *Pseudomonas* by virtue of markedly different colony colouring.



Product code
SB282: 5 L pack
SB283-25: 25 L pack

CHROMagar™ StrepB

Plate Reading

- Group B *Streptococcus*
--> Mauve
- Other microorganism
--> Blue, colourless or inhibited

For isolation and differentiation of
Streptococcus agalactiae (GBS)*

Group B Streptococcus (GBS) has been associated with severe neonatal infections such as septicaemia and meningitis. The detection of vaginal colonisation by GBS in pregnant women is the most effective strategy to prevent neonatal infections. CHROMagar™ *StrepB* is a powerful screening tool, sensitive and highly specific, allowing **detection of GBS (haemolytic as well as non-haemolytic) after only 18-24h of aerobic incubation.**

1st MRSA
chromogenic
detection media
(2002)

CHROMagar™ MRSA



Product code
MR502: 5 L pack
MR513-25: 25 L pack

Plate Reading

- Methicillin Resistant *Staphylococcus aureus* (MRSA)
--> Rose to mauve
- Methicillin Susceptible *Staphylococcus aureus* (MSSA)
--> Inhibited
- Other bacteria
--> Blue, colourless or inhibited

For isolation and differentiation of Methicillin Resistant *Staphylococcus aureus* (MRSA) including low level MRSA*

100% Sensitivity / Specificity⁽⁴⁾

CHROMagar introduced a revolution in this field in 2002, with the first chromogenic medium for the detection of Methicillin Resistant *Staphylococcus aureus*: CHROMagar™ MRSA. This medium led to such significant reductions in both the response time and laboratory workload, that it allowed an absolutely necessary wide-scale patient screening.

Failure to rapidly detect antibiotic resistant gram negative bacteria has contributed to their uncontrolled spread, and sometimes to therapeutic failures. Added to CHROMagar Orientation, CHROMagar has introduced a set of selective supplements specially designed for screening gram-negative bacteria which express different kinds of reduced antibiotic susceptibility.

CHROMagar™ ESBL



Product code
ESRT2: 5 L pack
ESRT3-25: 25 L pack

For detection of Extended Spectrum β-Lactamase producing bacteria*

Plate Reading

- ESBL *E. coli*
--> Dark pink to reddish
- ESBL *Klebsiella*, *Enterobacter*
--> Metallic blue
- ESBL *Proteus*
--> Brown halo

CHROMagar™ KPC



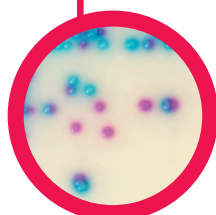
Product code
KPRT2: 5 L pack
KPRT3-25: 25 L pack

For detection of carbapenem-resistant bacteria*

Plate Reading

- Carbapenem[®] *E. coli*
--> Dark pink to reddish
- Carbapenem[®] *Klebsiella*, *Enterobacter*, *Citrobacter*
--> Metallic blue
- Carbapenem[®] *Pseudomonas*
--> Cream, translucent

CHROMagar™ VRE



Product code
VR952: 5 L pack
VR953-25: 25 L pack

Plate Reading

- VRE. *faecalis* / VRE. *faecium*
--> Pink to mauve
- *E. gallinarum* / *E. casseliflavus*
--> Blue or inhibited
- Other bacteria
--> Inhibited

For detection of Van A / Van B VRE. *faecalis* & VRE. *faecium**

Acquired Vancomycin resistance in *E. faecalis* and *E. faecium* has the potential to be transferred to aggressive pathogens. The efficiency of control measures to avoid their spread is dependent on the laboratory's ability to rapidly detect VRE. The use of CHROMagar™ VRE media allows Vancomycin resistant *E. faecalis* and *E. faecium* to be easily detected by colony colour after only **24 hours** of incubation.

CHROMagar™ Acinetobacter



Product code
AC092: 5L pack

Plate Reading

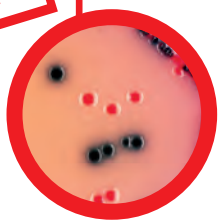
- *Acinetobacter* spp
--> Red

For detection of *Acinetobacter**

Acinetobacter is an organism that has a high capacity for survival on environmental surfaces. Its ability to acquire antimicrobial resistance is a cause of increased concern for nosocomial infections. In hospitals, *Acinetobacter baumannii*, for instance, can enter into the body through open wounds, catheters, and breathing tubes. Any effective infection control policy should include a faecal surveillance. CHROMagar™ *Acinetobacter* is a tool specifically designed to facilitate this step, by allowing its growth in an intense red colony colour.

1st commercially available chromogenic media (1989)!

Rambach™ Agar



Product code
RR701: 4* 1000 ml pack
RR703-25: 25 L pack

Plate Reading

- *Salmonella*
--> Red
- Many Coliforms
--> Blue, violet
- *Proteus*, etc.
--> Colourless

For detection and isolation of *Salmonella* species in clinical and food samples

93,7% Sensitivity⁽⁵⁾

Traditional media for detection of *Salmonella* had a very poor specificity. The workload of unnecessary examinations of suspect colonies was so high that real positive *Salmonella* colonies were often missed in routine testing.

Rambach™ Agar eliminates most false positives. Since Rambach™ Agar has a very high specificity: **(1) fewer samples are positive and have to be checked and (2) there is no more need to investigate 10 different suspect colonies per sample.**

CHROMagar™ Salmonella Plus



Product code
SA162: 5 L pack
SA163-25: 25 L pack

Plate Reading

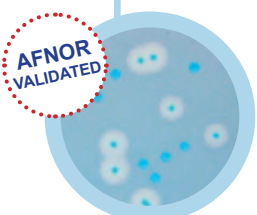
- *Salmonella* (including *S. typhi*, *S. paratyphi* A and lactose positive *Salmonella*)
--> Mauve
- *E. coli*
--> Colourless
- Coliforms
--> Blue

For detection and isolation of *Salmonella* species including lactose positive *Salmonella* in food specimens

99% Sensitivity⁽⁶⁾

The recent revision of ISO 6579 for *Salmonella* testing is a direct result of the growing incidence of lactose positive *Salmonella* spp. isolated from cases of food poisoning. CHROMagar™ Salmonella Plus agar has been introduced to **meet the requirements of ISO 6579** and provides clear, easily visible identification of *Salmonella* spp. including: lactose positive *Salmonella*, *S. typhi* and *S. paratyphi*.

CHROMagar™ Listeria Method



Product code

Isolation:
CHROMagar Listeria
LM852: 5 L pack

Confirmation:
CHROMagar Identification Listeria
LK970: 250 ml pack

Isolation Plate Reading

- *L. monocytogenes*
--> blue,
diameter less than 3mm,
regular and white halo

Confirmation Plate Reading

- *L. monocytogenes*
--> rose surrounded
by a white halo

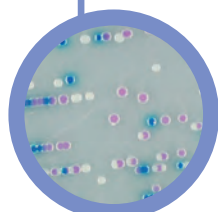
For detection, differentiation, enumeration and confirmation of *Listeria monocytogenes* from other bacteria in food samples

100% Sensitivity⁽⁷⁾

Listeria monocytogenes is a pathogenic bacterium which can cause serious food poisoning. Since *L. monocytogenes* and *L. innocua* have similar biochemical properties, they cannot be differentiated on traditional media (Palcam, Oxford).

On CHROMagar™ Listeria, *L. monocytogenes* colonies have a specific blue colour surrounded by a white opaque halo. The CHROMagar™ Listeria method allows **detection of negative samples in only 2 days**. This method requires only a single half Fraser enrichment step and was **validated by AFNOR**. Confirmation of positive samples can be performed by picking a suspect colony directly from **CHROMagar™ Listeria** and transferring it to **CHROMagar™ Identification Listeria** giving a result the next day.

CHROMagar™ O157



Product code
EE222: 5 L pack
EE223-25: 25 L pack

Plate Reading

- *E. coli* O157
--> Mauve
- Other bacteria
--> Steel blue, colourless
or inhibited

For the selective isolation and differentiation of *E. coli* O157 in food/clinical samples*

98% Sensitivity for *E. coli* O157⁽⁸⁾

The conventional medium for detection of *E. coli* O157, Sorbitol Mac Conkey Agar, has a poor specificity therefore creating a lot of false positives (*Proteus*, *E. hermannii*, etc.). Sorbitol Mac Conkey Agar is also difficult to read since the pathogen gives colourless colonies among red colonies.

CHROMagar™ O157 is a chromogenic medium with easier detection of ***E. coli* O157 as mauve colonies** among blue and colourless colonies. Selectivity can be increased by adding potassium tellurite to our medium.

CHROMagar™ Vibrio



Product code
VB912: 5 L pack
VB913-25: 25 L pack

Plate Reading

- *V. parahaemolyticus*
--> mauve
- *V. vulnificus* / *V. cholerae*
--> green blue to
turquoise blue
- *V. alginolyticus*
--> colourless

For isolation and detection of *V. parahaemolyticus*, *V. vulnificus* and *V. cholerae*

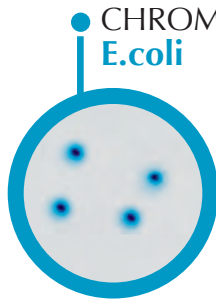
95% Specificity⁽⁹⁾

V. parahaemolyticus, *V. vulnificus* & *V. cholerae* are pathogenic bacteria which can cause serious seafood poisoning. For the detection of those bacteria, traditional methods (TCBS) are long, require heavy workload and are not very sensitive.

On the contrary, CHROMagar™ Vibrio medium helps to easily **differentiate *V. parahaemolyticus*, *V. vulnificus* & *V. cholerae*, from other *Vibrio* directly at the isolation step** by colony colour with a sensitivity higher than conventional methods.

E. coli is a fecal contamination indicator. The general food standard limits are approximately 50 *E. coli* bacteria per gram, therefore, it is important to detect and enumerate them accurately. Traditional methods for detecting *E. coli* are extremely tedious and usually require heavy workload with tests of many suspect colonies.

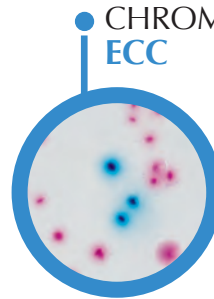
For detection and enumeration of *E. coli* in food and water samples



Product code
EC166: 5 L pack
EC168-25: 25 L pack

- Plate Reading**
- *E. coli* --> Blue
 - Other gram negative bacteria --> Colourless
 - Gram positive bacteria --> Inhibited

For the simultaneous detection and enumeration of *E. coli* and other coliforms in food or water samples



Product code
EF322: 5 L pack
EF323-25: 25 L pack

- Plate Reading**
- *E. coli* --> Blue
 - Other Coliforms --> Mauve
 - Other bacteria --> Colourless or inhibited



Product code
EL382: 5 L pack

- Plate Reading**
- *E. coli* --> Blue
 - Other coliform bacteria --> Purple
 - Other gram negative bacteria --> Colourless or inhibited

For the simultaneous detection and enumeration of *E. coli* and other coliforms in water samples

This is an innovative chromogenic culture medium to be used in broth form (without agar) within the water filtration technique, to impregnate the pad. **You can take an aliquot to prepare the exact quantity of broth you desire.** Thanks to this flexibility, you get rid of prepared media stock and shelf life management headaches, and are ensured of always working with fresh media.



Product code
AQ056: 100*100ml pack

- Reading**
- *E. coli* --> Blue to Blue Green Liquid
 - Other Coliforms --> Yellow Liquid

Presence/Absence of *E. coli* and coliforms in water samples

Liquid Technique

AquaCHROM™ is a non-agar based medium designed to detect the presence of *E. coli* and other coliforms in 100ml water samples. Its advantage, compared to other similar commercially available tests, resides in the fact that there is no need of ultra-violet lamp to confirm the presence of *E. coli* in the sample. The novel formulation of AquaCHROM™ uses two different chromogens (instead of the traditional chromogen/fluorogen combination) which enables test results to be **read under normal lighting conditions**. Samples develop a yellow colouration when coliforms are present and a green colouration when *E. coli* is present.

Also available

- TBX
- *C. sakazakii* Agar
- CHROMagar™ *B. cereus*
- CHROMagar™ Mastitis

References:

- (1) Odds F.C. and Bernaets R. 1994. J. Clin. Microbiol. **32**: 1923-1929.
- (2) Gaillot *et al.* 2000. J. Clin. Microbiol. **38**: 1587-1591.
- (3) Merlino J. *et al.* 1996. J. Clin. Microbiol. **34**: 1788-1793.
- (4) Taguchi *et al.* 2004. J. Jap. Ass. Infec. Dis. Jan. 54-58.
- (5) Gruenewald R. *et al.* 1991. J. Clin. Microbiol. **29**: 2354-2356.
- (6) de Beaumont C. *et al.* .2006. Poster, ECCMID meeting 2006
- (7) AFNOR validation study, Coignard M. 2005. ref CHR-21/1-12/01.
- (8) Bettelheim K.A. 1998. J. Appl. Microbiol. **85**: 425-428.
- (9) Angela Di Pinto Università degli Studi di Bari Aldo Moro, Italy

CHROMagar™ Packaging Sizes

The unit size of our packs is the **Liter** : i.e. quantity sufficient to make X L of media
With 1 liter, you can get 50 to 60 petri dishes

Standard available pack sizes are:



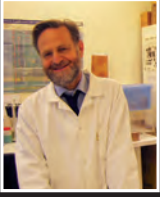
Also available for some products, 1L pack (upon availability) or bulk (upon request)

Advantages of purchasing media in dehydrated form:

- Flexibility of use: Prepare only the quantity you need
- Very easy to prepare.
- Long shelf life: 2 to 3 years.



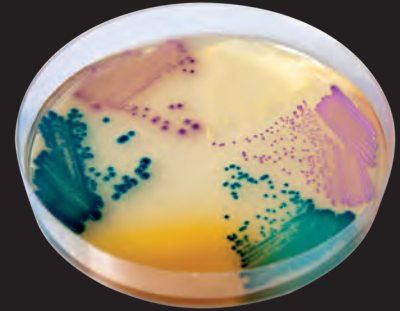
Pioneer in chromogenic media since 1979!




The first chromogenic culture medium (for detection of *E. coli*) was invented and patented by Dr. A. Rambach in 1979. The introduction of this medium triggered a revolution in microbial diagnosis and driven by the introduction of a whole range of media for the detection of key clinical & food borne pathogens. The use of chromogenic culture media for the detection of bacteria is increasing steadily despite the introduction of other (often molecular biology based) techniques.

What is chromogenic technology applied to culture media?

It is colouring the developing bacterial colonies with distinctive colours in order to allow an easier differentiation of the growing micro-organism. Dr A. Rambach developed and patented the use, in microbiology, of a technology based on a soluble colourless molecule (called chromogen) which was composed of a substrate, targeting a specific enzymatic activity and a chromophore. When the colourless chromogenic conjugate is cleaved by enzyme of the target organism, the chromophore is released, and, in its unconjugated form the chromogen exhibits its distinctive colour and, due to reduced solubility forms a precipitate. The result is a very specific & distinctive, colour based differentiation, which is clearly distinguishable to the naked eye under normal lighting conditions.



5 Reasons to choose CHROMagar™ Chromogenic Media to bring efficiency to your Microbial Analysis


Fast Results in 18h-24h


Worldwide Recognition


30 years Experience, Specialization and Know-How


Gain Flexibility Using dehydrated media


Intense Chromogenic Colours

Ask your local distributor for more information