CHROMagar™ Staph aureus

Instructions For Use
For Research Use Only (RUO).
Not for use in diagnostic procedures.

ENGLISH

Instructions For Use

Chromogenic medium for isolation and direct differentiation of *Staphylococcus aureus.*

REFERENCES

Pack Size			Ordering Reference	
5000 mL	250 Tests of 20 mL	=	TA672	Weight: 412.5 g

INTENDED USE

CHROMagar™ Staph aureus is a selective chromogenic culture medium intended for use in the qualitative direct detection, differentiation and presumptive identification of *Staphylococcus aureus* to aid in the diagnosis of *S. aureus* colonization. The test is performed with swabs from teguments, wounds or soft tissue specimens. Results can be interpreted after 18-24 h of aerobic incubation at 35-37 °C. The medium can also be used as an early warning indicator for diagnostic tests of infections to signal the possible presence of *S. aureus*. This use does not replace the institution's protocols.

Concomitant cultures are necessary to recover organisms for further microbiological testing or epidemiological typing. A lack of growth or the absence of colonies on CHROMagar™ Staph aureus does not preclude the presence of *S. aureus.* CHROMagar™ Staph aureus is not intended to diagnose infection nor to guide nor monitor treatment for infections.

CHROMagar™ Staph aureus can also be used in the detection of *S. aureus* in the analyses of food products for human consumption, animal feed and in environmental samples.

COMPOSITION

The product is composed of a powder base.

Product =	Pack
Total g/L	82.5 g/L
Composition g/L	Agar 15.0 Peptone and yeast extract 40.0 Salts 25.0 Chromogenic mix 2.5
Aspect	Powder Form
STORAGE	**15/30 °C**
FINAL MEDIA pH	6.9 +/- 0.2

Need some Technical Documents?

Available for download on www.CHROMagar.com

- Certificate of Analysis (CoA) --> One per Lot
- Material Safety Data Sheet (MSDS)

PREPARATION **(Calculation for 1 L)**

Step 1 Preparation

- Disperse slowly 82.5 g of powder base in 1 L of purified water.
- Stir until agar is well thickened.
- Autoclave at 110 °C during 5 min.

DO NOT AUTOCLAVE AT 121°C. DO NOT HEAT LONGER THAN 5 MIN.

Step 2 Pouring

- Cool in a water bath to 45-50 °C.
- Swirl or stir gently to homogenize.
- Pour medium into sterile Petri dishes.
- Let it solidify and dry.

Storage

- Store in the dark before use.
- Prepared media plates can be kept for one day at room temperature.
- Plates can be stored for up to one month under refrigeration (2/8 °C) if properly prepared and protected from light, dehydration and microbial contamination.

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SPECIMEN COLLECTION AND HANDLING

CHROMagar™ Staph aureus can be used with the following specimens:

- In clinical field : Swabs from teguments, wounds or soft tissue specimens.
- In industrial field : Food stuff, animal feed and environmental samples.

Sampling and transport equipment must be used in accordance with the recommendations of their suppliers for the conservation of *Staphylococcus aureus.*

MATERIAL REQUIRED BUT NOT PROVIDED

Standard microbiological laboratory material for culture media preparation, control, streaking, incubation and waste disposal.

INOCULATION

Related samples are inoculated by direct streaking on the plate.

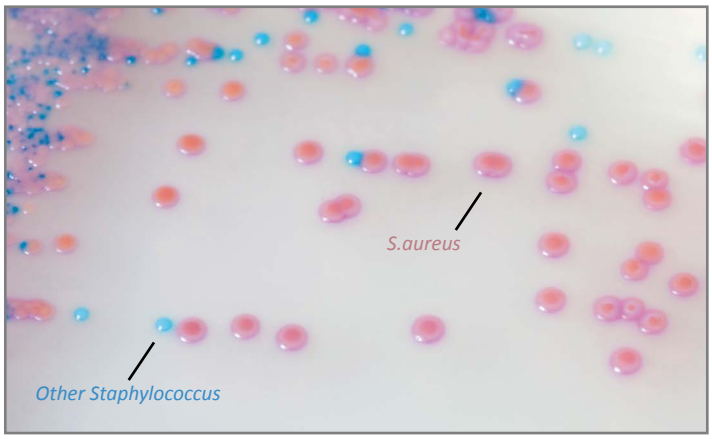
- If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.
- Streak sample onto plate
- Incubate at 35-37 °C for 18-24 h, in aerobic conditions.

INTERPRETATION

Qualitative reading and interpretation of the Petri dishes.

Microorganism	Typical colony appearance
S. aureus	→ pink to mauve
Other bacteria	→ inhibited, colourless, blue

Typical colony appearance



The pictures shown are not contractual.

PERFORMANCE

	Analytical data *	Clinical data **	
		CHROMagar™ Staph aureus	Reference medium (Horse blood agar)
Sensitivity	100 %	95.5 %	81.9 %
Specificity	100 %	99.4 %	98.9 %

* Data obtained after a 24 h incubation at 37 °C in aerobic conditions in the study "Evaluation of CHROMagar Staph. aureus, a new chromogenic medium, for isolation and presumptive identification of *Staphylococcus aureus* from human clinical specimens". Gaillot *et al.*, 2000. *J. Clin. Microbiol.*

** Data obtained after a 24 h incubation at 37 °C in aerobic conditions with 2000 samples (wounds, sputum, nasal and rectal swabs…), being positive 310, in the study "Evaluation of CHROMagar Staph. aureus, a new chromogenic medium, for isolation and presumptive identification of *Staphylococcus aureus* from human clinical specimens". Gaillot *et al.*, 2000. *J. Clin. Microbiol.*

LIMITATIONS AND COMPLEMENTARY TESTS

Note: If you focus on direct detection of MRSA strains, it can be obtained using our selective medium called CHROMagar™ MRSA.

- Confirmation tests such as latex agglutination and catalase can be performed directly from the plates on suspected colonies.
- Confirmation tests such as latex agglutination and catalase can be performed directly from the plates on suspected colonies.
- The final identification must be confirmed by biochemical tests (ex: hydrolysis of Hippurate, CAMP test), immunological tests (ex: latex agglutination) or by mass spectrophotometry (ex: Mal-di-Tof). They can be done directly from the suspicious colonies observed on the medium.

QUALITY CONTROL

Please perform Quality Control according to the use of the medium and the local QC regulations and norms.
Good preparation of the medium can be tested, isolating the following ATCC strains:

Microorganism	Typical colony appearance
S. aureus ATCC® 43300	→ mauve
S. aureus ATCC® 25923	→ mauve
S. saprophyticus ATCC® 15305	→ turquoise blue
E. coli ATCC® 25922	→ inhibited
E. faecalis ATCC® 29212	→ inhibited

WARNINGS AND PRECAUTIONS

- For Research Use Only (RUO). Not for use in diagnostic procedures.
- This laboratory product should be used only by trained personnel (healthcare professional, etc). Wear appropriate protective clothing, gloves and eye/face protection and handle appropriately with procedures and good laboratory practices.
- Use of the medium may be difficult for people who have problems recognising colours.
- Culture media should not be used as manufacturing material or components.
- Do not ingest or inhale the product.
- Do not use the product after the expiry date.
- Do not use the product if it shows any evidence of contamination or any sign of deterioration (compacted powder, color change, ...).
- Do not use the product if the packaging is damaged.
- Any change or modification in the production procedure may affect the results.
- Any change or modification of the required storage temperature may affect the performance of the product.
- Unappropriate storage may affect the shelf life of the product.
- Recap the bottles/vials tightly after each preparation and keep them in a low humidity environment, protected from moisture and light.
- Do not use the culture medium poured into a petri dish after a first use.
- After opening the bottles and with an appropriate conservation, open bottles can be used under the same conditions until each product's expiry date.
- Reading and interpretation should be performed using isolated colonies.
- Some precipitate may be observed in the agar but these do not affect the performance of the product.

• Interpretation of the test results should be made taking into consideration colonial and microscopic morphology and if necessary, the results of any other tests performed.
• Laboratory, chemical or biohazardous wastes must be handled and discarded in accordance with all local and national regulations.
• For hazard and precaution recommendations related to some chemical components in this medium, please refer to the pictogram(s) mentioned on the labels. The Material Safety Data Sheet (MSDS) is available on www.chromagar.com
• Any incident or complaint related to the environment must be declared to the manufacturer at the following email address: chromagar@chromagar.com
• Any serious incident occurring in connection with the environment must be declared to the competent authorities and to the manufacturer at the following email address: chromagar@chromagar.com

DISPOSAL OF WASTE

After use, all plates and any other contaminated materials must be sterilized or disposed of by appropriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at 121 °C for at least 20 minutes.

LITERATURE REFERENCES

Please refer to our website page «Publications» for scientific publications about this particular product.
Web link: http://www.chromagar.com/publication.php

IFU/LABEL INDEX

REF Catalogue reference

Consult instructions for use

Quantity of powder sufficient for X liters of media

Expiry date

Required storage temperature

Store away from humidity

Protect from light

Manufacturer

NT-EXT-043 USA V5.1 / 06-May-24

CHROMagar™
The Chromogenic Media Pioneer

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