

## STAPHYLOCOCCUS CHROMOGENIC AGAR

**CAT Nº: 2076**

For the detection and differentiation different species of *Staphylococcus*

### FORMULA IN g/l

Growth Factors	56.00	Chromogenic Mixture and Inhibitors	0.245
Peptone Mixture	41.00	Bacteriological Agar	12.50

**Final pH 7.0 ± 0.2 at 25°C**

### PREPARATION

Suspend 110 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. AVOID OVERHEATING. DO NOT AUTOCLAVE. Cool to 45-50°C. Homogenize gently and dispense into Petri dishes. The prepared medium should be stored at 8-15°C. The color is light amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

### USES

STAPHYLOCOCCUS CHROMOGENIC AGAR is a selective chromogenic medium used for the isolation, quantification and identification of *Staphylococcus spp* in clinical samples.

*S.aureus* is a pathogen which causes superficial and systemic infections. Due to its prevalence and clinical implications, its detection is of vital importance.

Staphylococcus chromogenic agar contains the necessary nutrients to develop staphylococcus and, at the same time, the mixture of chromogenic substrates allows the identification of the different species. The inhibitors prevent the development of the accompanying flora.

### Results

*S.aureus*: magenta

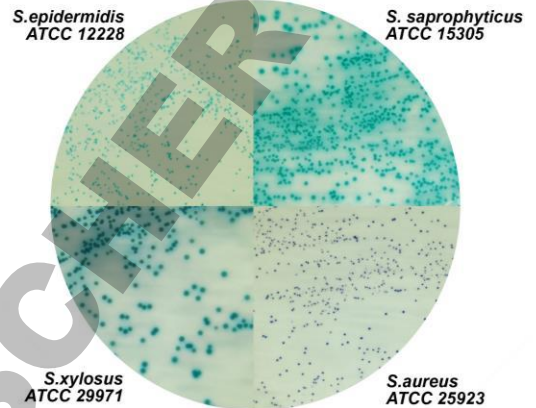
*S.xylosus*: dark blue

*S. saprophyticus*: greenish-blue

*S.epidermidis*: light green

Inoculate and incubate the medium at 35± 2°C for 24-48 hours. The staphylococcus usually develops within 24 hours, although there may be some strains which take up to 48 hours.

It can also be used for food, but confirmation is required.



## MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium after incubation at a temperature of 35± 2°C during 24-48 hours.

Microorganisms	Growth	Colony Color
<i>Staphylococcus aureus</i> ATCC 25923	Good	Magenta
<i>Staphylococcus aureus</i> ATCC 43300	Good	Magenta
<i>Staphylococcus epidermidis</i> ATCC 12228	Good	Light Green
<i>Staphylococcus xylosus</i> ATCC 29971	Good	Dark Blue
<i>Staphylococcus saprophyticus</i> ATCC 15305	Good	Greenish Blue
<i>Escherichia coli</i> ATCC 25922	Inhibited	
<i>Salmonella typhimurium</i> ATCC 14028	Inhibited	

## BIBLIOGRAPHY

Hutchison, M.J., Edwards, G.F.S., Morrison, D., ,, Evaluation of chromogenic MRSA Reference Laboratory presented at the 2005 Institute of BioMedical

Jablonski, L.M. and G.A. Bohach. 1997. *Staphylococcus aureus*. In M. Doyle, L. Beuchat and T. Montville (eds.), Food microbiology fundamentals and frontiers. ASM, Washington, DC.

U.S. Department of Health and Human Services. 1999. Biosafety in microbiological and biomedical laboratories, HHS Publication (CDC), 4th ed. U.S. Government Printing Office, Washington, DC.



## STORAGE

Once opened keep powdered medium closed to avoid hydration.

