Staphylococcus Chromogenic Agar

Cat. 2076

For the detection and differentiation of different species of Staphylococcus

Practical information

Aplications	Categories
Detection	Staphylococcus
Differentiation	Staphylococcus

Industry: Clinical

CE
IVD

Principles and 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.

Formula in g/L

Bacteriological agar	12,5	Peptone mixture	41
Growth factors	56	Chromogenic mixture and inhibitors	0,245

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 ºC. Homogenize gently and dispense into Petri dishes.

Instructions for use

For clinical diagnosis, use any type of clinical sample.
- 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 test is required.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Beige	Light amber, slightly opalescent	7,0 ± 0,2

Microbiological test

Incubation conditions: (35±2 ºC / 24-48 h).

Microrganisms	Specification	Characteristic reaction
Staphylococcus epidermidis ATCC 12228	Good growth	Colony color light green

Salmonella typhimurium ATCC 14028	Inhibited growth	
Staphylococcus saprophyticus ATCC 15305	Good growth	Colony color greenish blue
Escherichia coli ATCC 25922	Inhibited growth	
Staphylococcus aureus ATCC 25923	Good growth	Colony color magenta
Staphylococcus xylosus ATCC 29971	Good growth	Colony color dark blue
Staphylococcus aureus ATCC 43300	Good growth	Colony color magenta

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

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.