

## CEOS CHROMOGENIC SALMONELLA AGAR

### USES

CEOS Chromogenic Salmonella agar is a selective medium for isolation and identification of *Salmonella spp.*, including *S.typhi*, in clinical and food samples.

### PRINCIPLES AND PROCEDURES

Peptone and meat extract provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of group B. Sodium chloride maintains the osmotic balance of the medium. Chromogenic and selective mix allows to identify microorganisms on the basis of the color and morphology of the colonies while inhibiting most contaminant flora. Tween 20 enhances microbial growth. Agar is the solidifying agent.

### REAGENTS

#### CEOS Chromogenic Salmonella agar (g/l)

Peptone	7,00
Meat extract	1,00
Yeast extract	3,00
Sodium Chloride	5,00
Chromogenic and Selective mix	3,70
Tween 20	3,00
Agar	15,00

pH 7,5±0,2

Color of prepared media: beige, transparent.

### PRECAUTIONS

**IVD.** Only for professional use. Do not use product if there are visible signs of microbial contamination, color change, drying, cracking or other signs of quality deterioration. Apply aseptic techniques and identified precautions against microbiological hazards throughout all procedures.

Prepared plates, bottles, sample bottles and other contaminated materials have to be sterilized in autoclave after use and before disposing.



# CERTIFIKAT

## STORAGE AND SHELF LIFE

Products that are listed on cardboard packaging are packed in tight plastic foil, for better stability. Products must be kept at dark place and in temperature span suggested on labels, in original packaging until use. Moisture in form of fine mist or small drops on the inside of the lid, especially during and after keeping in the fridge, is acceptable and sign of medium freshness. Products can be used until expiration date (see packaging label) and incubated during recommended incubation periods.

If products from opened stack are kept on clean place where temperature is between 2-8°C, they can be used for one week (7 days). Exposure to light before and during incubation must be reduced.

## USERS QUALITY CONTROL

Inoculum for productivity: 50-100 CFU.

Inoculum for specificity:  $\leq 10^4$  CFU.

Inoculum for selectivity:  $10^3$ - $10^4$  CFU.

Incubation conditions: aerobically at  $35 \pm 2^\circ\text{C}$  for 18-24 hours.

Microorganism	Results
<i>Salmonella Typhimurium</i> ATCC 14028	Good growth, mauve colonies
<i>Salmonella Enteritidis</i> ATCC 13076	Good growth, mauve colonies
<i>Shigella flexneri</i> ATCC 12022	Good growth, colourless colonies
<i>Escherichia coli</i> ATCC 25922	Good growth, blue-green colonies
<i>Enterobacter cloacae</i> ATCC 23355	Good growth, blue-green colonies
<i>Proteus mirabilis</i> ATCC 25923	Partial to complete inhibition
<i>Pseudomonas aeruginosa</i> ATCC 27853	Partial to complete inhibition

## PROCEDURE

### Materials provided

CEOS Chromogenic Salmonella agar . Microbiologically controlled.

### Materials not provided

Additional culture medium, reagents and laboratory equipment if needed.

### Test procedure

Use plates in accordance with normal laboratory practice for *Salmonella* isolation (by direct inoculation to plates) or after enrichment in a non-selective and selective medium. Incubate the inoculated plates at  $37^\circ\text{C}$ /18-24 hours while observing the growth of typical purple-red colonies.



# CERTIFIKAT

## Results

Growth characteristics of different species are shown in the table:

Microorganism	Growth characteristics
Salmonella spp.	Good growth, purple-red colonies
Salmonella spp. lac+	Good growth, purple-red colonies
Salmonella Typhi	Good growth, purple-red colonies
E.coli	Weak growth with colorless colonies
Enterobacter spp.	Growth with blue green colonies
Klebsiella spp.	Weak growth with blue green colonies
Pseudomonas spp.	Inhibited
Proteus spp.	Weak growth with pale brown or green colonies
Gram-positive bacteria	Inhibited

## CHARACTERISTICS, PROPERTIES AND PROCEDURE RESTRICTIONS

The sensitivity of *Salmonella* detected on CEOS The chromogenic *Salmonella* agar is very high, therefore, without further identification tests, all plates without characteristic colonies can be discarded. Plates with typical (purple-red) colonies should be confirmed by biochemical and/or serological confirmation. Sometimes rare *Pseudomonas* and *Aeromonas* strains can grow with purple-red colonies. These strains are easily distinguished by the oxidase test.

## PACKAGING/AVAILABILITY

Plates ø 90 mm ready to use, 20pcs	50107500
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## MORE INFORMATIONS

For more informations contact manufacturer.

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