



SOYA CASEIN DIGEST AGAR (as per USP)

TM 345

INTENDED USE

For enrichment and isolation of fastidious microorganisms with or without blood.

COMPOSITION

Ingredients	Gm\Ltr.
Agar	15.00
Pancreatic digest of Casein	15.00
Soyatone (Soya Peptone)	5.00
Sodium chloride	5.00

PRODUCT SUMMARY AND EXPLANATION

SOYA CASEIN DIGEST AGAR is general purpose medium used with or without blood for enrichment and isolation of fastidious microorganisms. It is a good medium for isolation of anaerobes. This medium is used for a multitude of purposes including maintenance of stock cultures, plate counting, and isolation of microorganisms from a variety of specimen types and as a base for media containing blood.

PRINCIPLE

Medium contains combination of Pancreatic digest of casein and papaic digest of soyabean meal makes this media nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Sodium chloride maintains the osmotic balance. Agar act as solidifying agent. The initial specimens should be inoculated onto another suitable medium and incubated for 18-24 hours in an aerobic atmosphere supplemented with carbon dioxide. Many pathogens require carbon dioxide on primary isolation therefore plates may be incubated in an atmosphere containing approximately 3 - 10% CO₂ at 35 ± 2°C for 24 - 48 hours and on maximum incubation period for 3 - 5 days at 30°C - 35° C by using membrane filtration, spread plate and pour plate method. Choose one or two well-isolated colonies those resemble Haemophilus species and perform Gram-staining to confirm that the isolate is a gram-negative rod or cocco - bacillus. Prepare suspension of 10²CFU/ml (10-15 colonies) in 5 ml sterile, purified water or Soya casein digest broth and vortex to mix. Dip a swab in the suspension and inoculate the entire surface of the plate with the swab. With sterile forceps, place a Taxo X factor strip, a V factor strip and a XV strip on the plate, at least 20 mm apart. These strips are impregnated with Haemoglobin, routinely used for differentiation and isolation of Haemophilus sp. After incubation, isolated colonies of organisms from the original sample have been obtained such as Staphylococcus aureus. The colonies are sub cultured by interest so that the positive identification can be made by means of biochemical and/or serological testing.



INSTRUCTION FOR USE

1. Dissolve 40g in 1000ml distilled water.
2. Gently heat to boil with gentle swirling and dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
4. Cool the medium at 45-50°C.
5. Add 5% defibrinated sheep blood if required.
6. Gently shake to avoid bubbles and pour into sterile Petri plates as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogenous free flowing powder

Appearance of prepared medium:

Basal Medium: Light yellow coloured clear to slightly opalescent gel.

After addition of 5-7%w/v sterile defibrinated blood: Cherry red coloured opaque gel

pH (at 25°C): 7.3 ± 0.2

INTERPRETATION:

Cultural characteristics observed with added 5% defibrinated sheep blood or without blood, after inoculation and incubation as mentioned.

Microorganisms	ATCC	Inoculum (CFU/ml)	Recovery (%)	w/added blood
Incubation at 30 - 35°C for 18 - 24 hours				
<i>Staphylococcus aureus</i>	6538P	50 - 100	≥ 70%	Beta
<i>Staphylococcus aureus</i>	25923	50 - 100	≥ 70%	Beta
<i>Escherichia coli</i>	8739	50 - 100	≥ 70%	NA
<i>Escherichia coli</i>	25922	50 - 100	≥ 70%	NA
<i>Pseudomonas aeruginosa</i>	9027	50 - 100	≥ 70%	NA
<i>Pseudomonas aeruginosa</i>	27853	50 - 100	≥ 70%	NA
<i>Bacillus subtilis</i>	6633	50 - 100	≥ 70%	NA
<i>Salmonella typhimurium</i>	14028	50 - 100	≥ 70%	NA
<i>Klebsiella pneumoniae</i>	13813	50 - 100	≥ 70%	NA
<i>Enterococcus faecalis</i>	29212	50 - 100	≥ 70%	NA



Incubation at 30 - 35°C for 18 - 48 hours				
<i>Streptococcus pneumoniae</i>	6305	50 - 100	≥ 70%	Alpha
<i>Micrococcus luteus</i>	9341	50 - 100	≥ 70%	NA
* <i>Clostridium sporogenes</i>	19404	50 - 100	≥ 70%	NA
Incubation at 20-25°C up to 5 days				
<i>Candida albicans</i>	10231	50 - 100	≥ 70%	NA
<i>Aspergillus brasiliensis</i>	16404	50 - 100	≥ 50%	NA

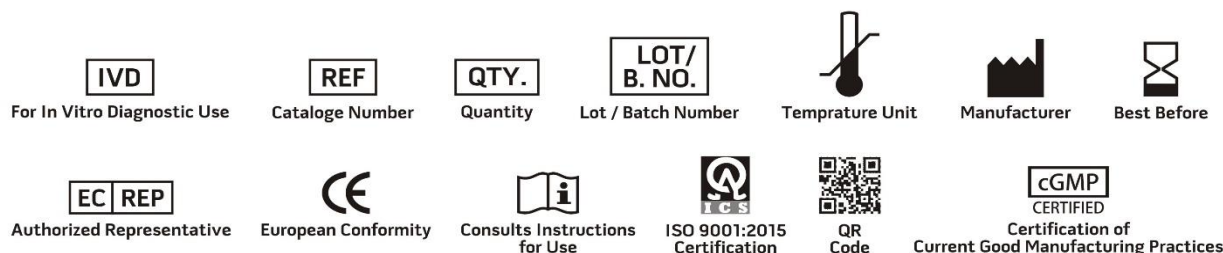
*Anaerobic incubation, NA; not applicable

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

REFERENCES

1. The United States Pharmacopoeia. 2009. Amended Chapters 61, 62 & 111, The United States Pharmacopoeial Convention Inc., Rockville, MD.
2. Directorate for the Quality of Medicines of the Council of Europe (EDQM). 2009. The European Pharmacopoeia, Amended Chapters 2.6.12, 2.6.13, 5.1.4, Council of Europe, 67075 Strasbourg Cedex, France.
3. Japanese Pharmacopoeia. 2008. Society of Japanese Pharmacopoeia. Amended Chapters 35.1, 35.2, 7. The Minister of Health, Labor, and Welfare.
4. Indian Pharmacopoeia. 2010. Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.