

Soyabean Casein Digest Agar (Tryptone Soya Agar)

Intended Use

Soyabean Casein Digest Agar is a general-purpose medium used for the isolation and cultivation of a wide variety of fastidious and non-fastidious microorganisms.

Summary

Soyabean Casein Digest Agar is a widely used medium, which supports the growth of wide variety of organisms even that of fastidious ones such as *Neisseria*, *Listeria*, and *Brucella* etc. The medium with addition of blood provides perfectly defined haemolysis zones, while preventing the lysis of erythrocytes due to its sodium chloride content. It has been frequently used in the health industry to produce antigens, toxins etc. It's simple and inhibitor-free composition makes it suitable for the detection of antimicrobial agents in the food and other products. Tryptone Soya Agar is recommended by various pharmacopoeias as sterility testing medium.

Principle

Gunn *et al.*, used this medium for the growth of fastidious organisms and study of haemolytic reaction after addition of 5% v/v blood. The combination of tryptone and soya peptone makes this media nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Sodium chloride maintains the osmotic balance.

Formula*

Ingredients	g/L
Tryptone	15.0
Soya Peptone	5.0
Sodium Chloride	5.0
Agar	15.0
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Pharmaceutical samples

Specimen Collection and Handling

Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 40.00 g of the powder in 1000 mL purified / distilled water & mix thoroughly.
2. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. To prepare Blood Agar Plates, add 5-10 % sterile, defibrinated blood to the sterile agar which has been cooled to 45°C-50°C.

Quality Control

Dehydrated Appearance: Light yellow coloured, homogenous, free flowing powder.

Prepared Appearance: Light yellow coloured, very slightly opalescent gel forms in petridishes.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 30°C-35°C for ≤ 3 days for bacteria and at 30°C-35°C and 20°C-25°C for ≤ 5 days for fungi.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism.

Organism (ATCC)	Growth	Incubation Temperature
<i>Escherichia coli</i> (8739)	Good	30°C-35°C
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (6538)	Good	30°C-35°C
<i>Pseudomonas aeruginosa</i> (9027)	Good	30°C-35°C
<i>Bacillus spizizenii</i> (6633)	Good	30°C-35°C
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Abony</i> (NCTC 6017)	Good	30°C-35°C
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i> (14028)	Good	30°C-35°C
<i>Candida albicans</i> 3147 (10231)	Good	30°C-35°C
<i>Candida albicans</i> 3147 (10231)	Good	20°C-25°C
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good	30°C-35°C
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good	20°C-25°C

Note: For good growth - Growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Precautions / Limitations

This medium is general purpose medium and may not support the growth of fastidious organisms

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. The United States Pharmacopoeia, 2018, The United States Pharmacopoeial Convention Inc., Rockville, MD.
2. Indian Pharmacopoeia, 2018, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.
3. Gunn B. A., Ohashi D K., Gaydos C. A., Holt E. S., 1977, J. Clin. Microbiol., 5(6): 650.
4. Forbes B.A., Weissfeld D.F., 1998, Bailey & Scotts Diagnostic Microbiology, 10th Ed., Mosby Inc. St. Louis, Mo.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201190210100	Dehydrated Culture Media	100 g
201190210500	Dehydrated Culture Media	500 g
201190212500	Dehydrated Culture Media	2.5 k
201190215000	Dehydrated Culture Media	5 k
203190580100	Bottle Media	100 mL
203190580250	Bottle Media	6 x 250 mL
203190580500	Bottle Media	500 mL
203190620012	Ready Prepared Slant	12 Slants
205190900100	Ready Prepared Plate (90 mm)	100 Plates
205190900400	Ready Prepared Plate (90 mm)	400 Plates
205191040200	Ready Prepared Plate (55 mm)	200 Plates
205191040800	Ready Prepared Plate (55 mm)	800 Plates

 Temperature Limit	 Manufacturer	LOT	Batch Code	 Date of Manufacture	 This way up	RO	Received on	
REF	Catalogue Number	 i	Consult Instructions for use	 Use-by Date	 H	Hygroscopic keep container tightly closed	OO	Opened on

Revision: 0825/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.