

Technical Information

Casein Acid Hydrolysate, Certified

Product Code: BA2189

Principle & Interpretation

Acicase, Certified is manufactured under controlled condition by acid hydrolysis of milk protein. It has Sodium chloride less than 3% and is Vitamin free. It is suitable for media requiring high amino acid content with low sodium chloride levels. It is particularly valuable in studying the growth requirement of bacteria. It can be used for preparing antibiotic sensitivity test media including Mueller Hinton Agar (DM1173), in media requiring quantitative addition of tryptophan, in vaccine preparation as a source of high concentration of free amino acids .

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. It is biological origin product since variation in colour of powder and clarity may observed.
2. Each lot of the product has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user 's requirement.
3. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium prepared by the product.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Off white to light yellow homogenous free flowing powder characteristic odour but not putrescent

Solubility

Freely soluble in distilled/purified water, insoluble in alcohol and ether.

Clarity

1% w/v aqueous solution is clear without any haziness after autoclaving at 15 lbs pressure (121°C) for 15minutes.

pH

pH of 2% w/v aqueous solution at 25°C 6.10 - 7.10

Microbial Load :

Bacterial Count : <= 2000 CFU/gram by plate method, when incubated at 30-35°C for not less than 3 days

Yeast & mould Count : <= 100 CFU/gram by plate method, when incubated at 20-25°C for not less than 5 days.

Test for pathogens

1. *Escherichia coli*- Absent/gram of sample
2. *Salmonella* species- Absent/10 gram of sample
3. *Pseudomonas aeruginosa*- Absent/gram of sample



Dehydrated Culture Media
Bases / Media Supplements

4. *Staphylococcus aureus*- Absent/gram of sample
5. *Candidaalbicans*- Absent/gram of sample
6. *Clostridia*- Absent/gram of sample

Indole Test : Tryptophan Content: Absent

Cultural response : Cultural response observed after incubation at 35 - 37°C for 18-48 hours by preparing MuellerHinton Agar (DM1173), using Acicase, Certified as an ingredient.

Cultural response

Organism

Escherichia coli ATCC 25922(WDCM 00013)

Haemophilus influenzae ATCC 49247

Neisseria gonorrhoeae ATCC 49226

Pseudomonas aeruginosa ATCC27853(WDCM 00025)

Staphylococcus aureus subsp. *aureus* ATCC25923 (WDCM 00034)

Enterococcus faecalis ATCC 29212(WDCM 00087)

Streptococcus pneumoniae ATCC 6305

Growth

Luxuriant

Good-luxuriant(on Mueller Hinton Chocolate Agar)

Luxuriant

Luxuriant

Luxuriant

Luxuriant

Luxuriant (on Mueller Hinton Blood Agar)

Thymine / Thymidine content : Following discs were tested for standard ATCC strains and zone of inhibition were measured after an incubation 35-37°C for 18 hours. (As per CLSI Protocol M6-A2 & Standards as per CLSI M100-S19)

***Escherichia coli* ATCC 25922(WDCM 00013) :**

Co-Trimoxazole COT 25mcg (SD1010) 23mm- 29mm

***Staphylococcus aureus* subsp. *aureus* ATCC 25923 (WDCM 00034) :**

Co-Trimoxazole COT 25mcg (SD1010) 24mm- 32mm

***Enterococcus faecalis* ATCC 29212(WDCM 00087) :**

Co-Trimoxazole COT 25mcg (SD1010) >= 20mm

Trimethoprim TR 5mcg (SD1039) >= 20mm

***Staphylococcus aureus* subsp. *aureus* ATCC 43300 (WDCM 00211) :**

Oxacillin OX 1mcg (SD1088) No zone or very hazy zone.

Divalent cation content : Following discs were tested for standard ATCC strains and zone of inhibition were measured after an incubation 35-37°C for 18 hours. (As per CLSI Protocol M6-A2 & Standards as per CLSI M100-S19)

***Staphylococcus aureus* subsp. *aureus* ATCC 25923 (WDCM 00034) :**

Tetracycline TE 30mcg (SD1037) 24mm- 30mm

***Escherichia coli* ATCC 25922 (WDCM 00013) :** Tetracycline TE 30

mcg (SD1037) 18mm- 25mm

***Pseudomonas aeruginosa* ATCC 27853 (WDCM 00025) :**

Amikacin AK 30mcg (SD1035) 18mm- 26mm

Gentamicin GEN 10mcg (SD1016) 17mm-23mm

Tobramycin TOB 10mcg (SD1044) 20mm-26mm

Chemical Analysis

Total Nitrogen : ≥12.00 %

Amino Nitrogen : ≥6.00 %

Sodium chloride : ≤2.50 %

Loss on drying : ≤5.00 %

Residue on ignition : ≤4.50 %

Storage and Shelf Life

Store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use .

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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performance parameters.