

Technical Information

Casein Acid Hydrolysate, Vitamin Free

Product Code: BA2190

Principle & Interpretation

Acicase, Vitamin Free is manufactured under controlled condition by acid hydrolysis of milk protein. Vitamins and other growth promoting compounds are largely destroyed in the process. Hence it is suitable for the preparation of culture media employed in the bacteriological assay of vitamins and antibiotic sensitivity.

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 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 (121ºC) for 15minutes.

нα

pH of 2% w/v aqueous solution at 25ºC

5.0 - 7.0

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
- 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 Mueller

Hinton Agar (DM1173), using Acicase, Vitamin free as an ingredient.

Cultural response Growth

Organism

Escherichia coli ATCC 25922(WDCM 00013) Luxuriant

Haemophilus influenzae ATCC 49247 Good-luxuriant(on Mueller Hinton Chocolate Agar)

Neisseria gonorrhoeae ATCC 49226 Luxuriant Pseudomonas aeruginosa ATCC27853(WDCM 00025) Luxuriant Staphylococcus aureus subsp. aureus ATCC25923 (WDCM 00034) Luxuriant Enterococcus faecalis ATCC 29212(WDCM 00087) Luxuriant

Streptococcus pneumoniae ATCC 6305 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 perCLSI 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 : ≥7.00 % Amino Nitrogen : ≥4.50 % Sodium chloride : ≤40.00 % Loss on drying : ≤5.00 % Residue on ignition: ≤42.00 %



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.