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**Actidione Agar with Actidione**

Actidione Agar with Acitidione is used for the enumeration and detection of bacteria in specimens containing large number of yeasts and moulds.

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| REF: V/AD01.100 100 Gram REF: V/AD01.500 500 Gram | REF:V/AD01.250 250 Gram |

# CLINICAL SIGNIFICANCE

Actidione Agar was formulated by Green and Gray (1), which may be used for microbiological investigation during brewing and baking. Actidione (Cycloheximide) at a concentration of 0.001% permits the growth of bacteria and inhibits the growth of most yeasts and moulds except dermatophytes. This medium may be used for the estimation of bacterial contamination of pitching yeast. Addition of penicillin or streptomycin may be used for selective isolation of dermatophytes.

**METHOD PRINCIPLE**

Casein enzymic hydrolysate acts as source of nitrogen while yeast extract serves as a rich reservoir of vitamins. Dextrose in high amount along with mineral salts at acidic pH favour sugar fermentation.

# MEDIA COMPOSITION

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| **Item** | Formula perliter of medium |
| * Casein enzymic hydrolysate
* Yeast extract
* Dextrose
* Monopotassium phosphate
* Potassium chloride
* Calcium chloride
* Magnesium sulphate
* Ferric chloride
* Manganese sulphate
* Bromo cresol green
* Actidione (Cycloheximide)
* Agar
 | 54500.550.4250.1250.1250.00250.00250.0220.0115 |

**PRECAUTIONS AND WARNINGS**

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

* Wearing personnel protective equipment (overall, gloves, glasses,).
* Do not pipette by mouth.
* In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
* Respect country requirement for waste disposal.

S56: dispose of this material and its container at hazardous or special waste collection point.

S57: use appropriate container to avoid environmental Contamination.

S61: avoid release in environment.

For further information, refer to the Actidione Agar with Acitidione material safety data sheet.

# STORAGE AND STABILITY

**Lab.Vie**.Actidione Agar with Acitidione dehydrated media are stable until expiration date stated on label when properly stored 10-30°C. The prepared medium should be stored at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to avoid lump development due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Final pH 5.5 ± 0.2 at 25°C

# MEDIA PREPARATION

1. Suspend 75.26 grams in 1000 ml distilled water.
2. Adjust pH to 5.5 ± 0.2 at 25°C
3. Heat to boiling to dissolve the medium completely.
4. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.
5. Cool to 45°C. Mix well before pouring into sterile Petri plates.

Warning : \*Actidione (Cycloheximide) is very toxic. Avoid skin contact or aerosal formation and inhalation.

**Deterioration**

The color of **Lab.Vie**.Actidione Agar with Acitidione is Light yellow to light green homogeneous free flowing powder. If there are any physical changes, discard the medium.

The hydrated medium is Greenish blue clear to slightly opalescent gel forms in Petri plates, media should not be used if there are any signs of deterioration (shrinking, cracking, or discoloration), and contaminations.

# SPECIMEN COLLECTION AND PRESERVATION

Clinical samples

# EQUIPMENT REQUIRED NOT PROVIDED

* Sterile cups
* Sterile tubes
* Sterile loops
* Incubator

# PERFORMANCE CHARACTERISTICS

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

# Cultural characteristics observed after an incubation at 30ºC for 40-48 hours.

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| **Test Organisms** | **Growth** |
| *Escherichia coli ATCC 25922* | Good - Luxuriant |
| *Lactobacillus fermentum ATCC 9338* | Good - Luxuriant |
| *Proteus mirabilis ATCC 25933* | Good - Luxuriant |
| *Saccharomyces cerevisiae ATCC 9763* | Inhibited  |
| *Saccharomyces uvarum ATCC 28098* | Inhibited |

# QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control values are found outside the defined range, check the system performance. If control still out of range please contact **Lab.Vie**.technical support.

# REFERENCES

1. Green, S.R. and Gray, P.P. 1950, Wallerstein Lab. Communication 13,357.

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| **SYMBOLS IN PRODUCT LABELLING** |
| **IVD** | For in-vitro diagnostic use | Number of <n> test in the pack |
| **LOT** | Batch Code/Lot number | Caution |
| **REF** | Catalogue Number | Do not use if package is damaged |
|  | Temperature Limitation |  Consult Instruction for use |
|  | Expiration Date |  |
|  | Manufactured by |  |

 **Ismailia – Free zone, Ismailia – Egypt IFU-S-02, Rev. 03 - December 201**9

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