

## CM 20803 - HERELLEA AGAR

### INTENDED USE

For the selective isolation and differentiation of gram-negative, fermentative and non-fermentative organisms especially for differentiation of organisms of *Mima* and *Herellea* group.

### PRODUCT SUMMARY AND EXPLANATION

Identification of *Mima polymorpha* and *Herellea vaginicola* now named as genus *Acinetobacter*, was difficult in gonorrhoea cases due to presence of large numbers of gram-positive cocci and gram-negative rods. *Herellea* Agar was formulated by Mandel, Wright and McKinnon, which differentiated gram-negative, fermentative and non-fermentative organisms. This medium is particularly suitable for the isolation of *Acinetobacter calcoaceticus*, *A. anitratum* (formerly *H. vaginicola*) and *A. lwoffii* (formerly *M. polymorpha*).

### COMPOSITION

| Ingredients        | Gms / Ltr |
|--------------------|-----------|
| Tryptone           | 15.000    |
| Soya peptone       | 5.000     |
| Sodium chloride    | 5.000     |
| Lactose            | 10.000    |
| Maltose            | 10.000    |
| Bile salts mixture | 1.250     |
| Bromocresol purple | 0.020     |
| Agar               | 16.000    |

### PRINCIPLE

Tryptone and Soya peptone are sources of carbon, nitrogen, vitamins and minerals. Sodium chloride provides the essential ions and also maintains the osmotic equilibrium of the medium. Bile salts mixture in the medium acts as selective agent, inhibiting the growth of *Neisseria* species and other gram-positive organisms. Lactose and maltose are the fermentable carbohydrates. Bromocresol purple acts as the pH indicator. Fermentative gram-negative bacteria ferment the carbohydrates to produce acid, which cause a corresponding change in the colour of pH indicator dye to yellow. Non-fermenters can therefore be easily distinguished from the fermenters by the pale lavender colour of the former.

### INSTRUCTION FOR USE

Dissolve 62.27 grams in 1000 ml purified/distilled water.  
Heat to boiling to dissolve the medium completely.  
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.  
Cool to 45-50°C. Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.  
Appearance of prepared medium : Purple coloured, clear to slightly opalescent gel forms in Petri plates.  
pH (at 25°C) : 6.8±0.2

### INTERPRETATION

Cultural characteristics observed after an incubation.



| Microorganism                       | ATCC  | Inoculum (CFU/ml) | Growth         | Recovery | Colour of colony | Incubation Temperature | Incubation Period |
|-------------------------------------|-------|-------------------|----------------|----------|------------------|------------------------|-------------------|
| Acinetobacter calcoaceticus         | 17961 | 50-100            | Good-luxuriant | >=50%    | Pale lavender    | 35 - 37°C              | 18-24 Hours       |
| Acinetobacter lwoffii               | 9957  | 50-100            | Good-luxuriant | >=50%    | Pale lavender    | 35 - 37°C              | 18-24 Hours       |
| Escherichia coli                    | 25922 | 50-100            | Good-luxuriant | >=50%    | Yellow           | 35 - 37°C              | 18-24 Hours       |
| Staphylococcus aureus subsp. aureus | 25923 | >=10 <sup>3</sup> | Inhibited      | 0%       | -                | 35 - 37°C              | 18-24 Hours       |
| Listeria monocytogenes              | 19112 | >=10 <sup>3</sup> | Inhibited      | 0%       | -                | 35 - 37°C              | 18-24 Hours       |

#### PACKAGING:

Inpacksize of 500 gm bottles.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

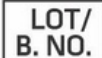
#### DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

#### REFERENCES

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Mandel A. D., Wright K. and McKinnon J. M., 1964, J. Bacteriol., 88:1524.
5. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
6. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17<sup>th</sup> Ed., APHA Inc., Washington, D.C.



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|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <br>GMP<br>Good Manufacturing<br>Practices Certified | <br>IVD<br>For In Vitro Diagnostic Use                                                                            | <br>QTY.<br>Quantity    | <br>LOT/<br>B. NO.<br>Lot / Batch Number | <br>REF<br>Catalogue Number          | <br>Manufacturer |
| <br>Temperature Unit                                 | <br>EC REP<br>Authorized Representative<br><small>MedNet GmbH<br/>Buckhorn 10,<br/>48163 Münster, Germany</small> | <br>European Conformity | <br>QR<br>Code                           | <br>Consults Instructions<br>for Use | <br>Best Before  |

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.  
\*For LabUse Only