

# Chocolate Agar Base

Medical laboratories enriched media recommended for the isolation of *Neisseria gonorrhoeae* from chronic and acute cases of gonococcal infections.

|                         |          |                         |          |
|-------------------------|----------|-------------------------|----------|
| REF: BS.1/CC01.100.0100 | 100 Gram | REF: BS.1/CC01.250.0250 | 250 Gram |
| REF: BS.1/CC01.500.0500 | 500 Gram |                         |          |

## CLINICAL SIGNIFICANCE

Chocolate agar base is an enriched selective medium. It is used for the cultivation and isolation of *Neisseria* species and *Haemophilus Influenza* from clinical specimens such as Blood, throat, Urethral, Rectal, Cervical, Vaginal, Oropharyngeal, Conjunctival and sterile body fluids.

## METHOD PRINCIPLE

*Neisseria gonorrhoeae* is a gram-negative bacteria and the causative agent of gonorrhea, however it is also occasionally found in the throat. The cultivation medium for gonococci should ideally be a rich nutrients base with blood, either partially lysed or completely lysed. The diagnosis and control of gonorrhea have been greatly facilitated by improved laboratory methods for detecting, isolating and studying *N. gonorrhoeae*. Chocolate Agar Base, with the addition of supplements, gives excellent growth of the gonococcus without overgrowth by contaminating organisms

## MEDIA COMPOSITION

| Item                        | Formula per liter of medium |
|-----------------------------|-----------------------------|
| Proteose Peptone            | 20.00 g                     |
| glucose                     | 0.500 g                     |
| Sodium Chloride             | 5.00 g                      |
| Disodium hydrogen phosphate | 5.00 g                      |
| Agar                        | 15.00 g                     |

## 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 chocolate agar base material safety data sheet.

## STORAGE AND STABILITY

**BioScien** Chocolate Agar Base should be stored between 10-30°C in a tightly closed container and the prepared medium 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 7.3 ± 0.2 at 25°C**

## PREPARATION

### Preparation of hemoglobin solution

Add hemoglobin to distilled water and bring volume to 500 ml to prepare 2% solution. Mix thoroughly and autoclave for 15 min at 15lbs pressure at 121°C. Cool at 45°C -50°C.

### Preparation of medium

Suspend 45.5 grams in 495 ml purified/ distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add equal amount (495 ml) of sterile Hemoglobin. Also add the contents or one vial of Yeast Autolysate Supplement or Vitamino Growth Supplement reconstituted as directed. Mix well and pour into sterile Petri plates. When single strength medium is desired, suspend 45.5 grams in 1000 ml distilled water.

### Deterioration

The color of **BioScien** Chocolate Agar Base medium is cream to yellow homogeneous free flowing powder. Basal medium: Light amber colored clear to slightly opalescent gel. After addition of hemoglobin: Chocolate brown colored opaque gel forms in Petri plates. If there are any physical changes for powder or signs of deterioration (shrinking, cracking, or discoloration), and contaminations for hydrated media, discard the medium.

## SPECIMEN COLLECTION AND PRESERVATION

Clinical samples - urethral swabs, urine samples.

## EQUIPMENT REQUIRED NOT PROVIDED

- Sterile cups
- Sterile petri-dishes
- Incubator
- Autoclave

## CHARACTERISTICS OF THE COLONIES

| Microorganism                                | Growth    |
|----------------------------------------------|-----------|
| <i>Neisseria gonorrhoeae</i><br>ATCC 19424   | luxuriant |
| <i>Haemophilus influenzae</i><br>ATCC 19418  | luxuriant |
| <i>Streptococcus pyogenes</i><br>ATCC 19615  | luxuriant |
| <i>Neisseria meningitidis</i><br>ATCC 13090  | luxuriant |
| <i>Streptococcus pneumoniae</i><br>ATCC 6303 | luxuriant |

## 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 **BioScien** technical support.

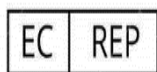
## PERFORMANCE CHARACTERISTICS <sup>(4)</sup>

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

## REFERENCES

- 1-McLeod J. W., Cootes J. C., Happold F. C., Priestely D. P., Wheatley B., 1934, J. Path. Bacteriol., 39:221.
- 2-Seventh Annual Year book (1936-37) P.133, suppl., Am. J. Pub.Health.27: no.3 : 1937.
- 3-Am. J. Syphilis, 22:55:1938
- 4-Carpenter C. M., Bucca M. A., Buck T. C., Casman E. P., Vhrstensen C. W., Crowe E., Drew R., Hill J., Lankford L. E., Morton H.E., Peizer L. R., Shaw C. J., and Thayer J. D., 1949, Am. J. Syphil. Gonorrh. Veneral Diseases, 33:164.
- 5-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.
- 6-Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition

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



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