Amies with Charcoal Transport Medium

Intended Use

Amies with Charcoal Transport Medium is recommended for transportation and preservation of microbiological specimen.

Summary

The transport medium should be semi-solid, non-nutritive, and reductive and should be able to hamper selfdestructive enzymatic reactions within the cells and in addition, must inhibit toxic oxidation reactions. Amies modified Stuart's Transport Medium by replacing glycerophosphate with an inorganic phosphate buffer and adding charcoal to the medium. This modified medium gave a higher percentage of positive results than the transport medium of Stuart.

Principle

Transport Medium provides a reduced environment due to the presence of sodium thioglycollate and small amount of agar. Charcoal helps to neutralize materials that are toxic to sensitive pathogens like *Neisseria gonorrhoeae*. Calcium, magnesium, potassium and sodium salts help the survival of gonococcal cells and also control permeability of bacterial cells. Phosphates buffer the medium.

| Formula* | |
|----------------------------------|---------------|
| Ingredients | g/L |
| Sodium Chloride | 3.0 |
| Potassium Chloride | 0.2 |
| Calcium Chloride | 0.1 |
| Magnesium Chloride | 0.1 |
| Monopotassium Phosphate | 0.2 |
| Disodium Phosphate | 1.15 |
| Sodium Thioglycollate | 1.0 |
| Charcoal | 10.0 |
| Agar | 4.0 |
| Final pH (at 25°C) | 7.3 ± 0.2 |
| *Adjusted to suit performance pa | arameters |

Directions

- 1. Collect the sample using sterile swab.
- 2. Open the cap of the media tube and fix the swab inside the notch.
- 3. Insert the swab into media and cap it.

Quality Control

Appearance: Black coloured, opaque, semi-solid gel in tubes as butts.

Cultural Response: Cultural characteristics observed after an incubation of ATM medium with sterile cotton swabs dipped in the culture suspensions at room temperature (20°C-25°C) for 18-24 hours. The swabs were streaked on Tryptone Soya Agar plates and incubated at 35°C-37°C for 18-48 hours.

| Organism (ATCC) | Growth |
|---|--------|
| Streptococcus pyogenes Strain Bruno (19615) | Good |
| Bacteroides fragilis (25285) | Good |
| Neisseria gonorrhoeae (49226) | Good |

Remarks

- 1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discolouration, drying or any other sign of deterioration.
- 2. Good laboratory practices and hazard precautions must be observed at all times.
- 3. After use media containers, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.

- 4. All autoclaved biohazards should be disposed off in accordance with state and local environmental regulations.
- 5. Only qualified personnel who have been trained in microbiological procedures should handle all infected specimens and inoculated culture media.
- 6. User should ensure that any machinery or apparatus used and by chance contaminated must be safely disinfected or sterilized. The environment in which microbiological cultures are handled must also be taken into account.

Storage and Stability

- 1. Store the ready to use Amies with Charcoal Transport Medium at 15°C-25°C, away from light.
- 2. Stability of Amies with Charcoal Transport Medium is as per expiry date mentioned on the label.

Limitations

It may not be suitable for the transport of fastidious organisms.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

- 1. Amies C.R., 1967, Can. J. Public Health, 58:296.
- 2. Stuart R.D., 1946, J. Path. Bact., 58:343.
- 3. Stuart R.D., 1959, Pub. Hlth. Rep., 74:431.
- 4. Stuart R.D., Toshach S.R. and Patsula T.M., 1954, Can. J. Pub. Hlth., 45:75.
- 5. MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
- 6. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
- 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.
- 8. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

| Cat. No. | Product Description | Pack Size |
|--------------|---------------------|-----------|
| 203010410005 | Ready Prepared Tube | 25 x 5 mL |

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.