



PRODUCT SPECIFICATION SHEET

Brain Heart Infusion w/ PABA (DM1476)

Intended Use

Brain Heart Infusion w/ PABA (DM1476) is recommended for examination of blood from patients under Sulphonamide therapy.

Product Summary and Explanation

Brain Heart Infusion w/ PABA is highly nutritious media which can support luxuriant growth of wide variety of microorganisms including bacteria, yeasts and moulds ⁽¹⁾ and is often used for isolation of pathogens from clinical specimens especially blood. ⁽²⁾ PABA is an active inhibitor of the bacteriostasis produced by the sulfonamide drugs; also it serves as an accessory growth factor for several species of bacteria. Addition of PABA in the medium also helps to neutralize the effect of antimicrobials present in the blood of patients under sulphonamide therapy enabling the detection of organisms from blood easier. ⁽³⁾

Principles of the Procedure

Brain Heart Infusion w/ PABA contains peptic digest of animal tissue and calf brain and beef heart infusion provides carbon, nitrogen, amino acids and vitamins. Dextrose serves as a source of energy. Sodium chloride helps in maintaining the osmotic equilibrium. Para amino benzoic acid is an active inhibitor of the bacteriostasis produced by the sulfonamide drugs; also it serves as an accessory growth factor for several species of bacteria. Therefore, para amino benzoic acid helps to neutralize the effect of antimicrobials present in the blood of patients under sulphonamide therapy making isolation of organisms from blood easier.

Formula / Liter

Ingredients	Gms / Liter
Calf brain, infusion from	200.00
Beef heart, infusion from	250.00
Peptic digest of animal tissue	10.00
Dextrose	2.00
Sodium chloride	5.00
Disodium phosphate	2.50
p-Amino benzoic acid (PABA)	0.05
Final pH: 7.4 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions

1. Suspend 37.05 grams of the medium in one liter of distilled water.
2. Heat if necessary, to dissolve the medium completely.
3. Dispense as desired.
4. Autoclave at 121°C, 15 psi pressure, for 15 minutes / validated cycle.





PRODUCT SPECIFICATION SHEET

Quality Control Specifications

Dehydrated Appearance	Cream to yellow colored, homogeneous, free flowing powder
Prepared Medium	Light amber coloured, clear to very slightly opalescent solution without any precipitate
Reaction of 3.7% Solution	pH : 7.4 ± 0.2 at 25°C
Gel Strength	Not Applicable

Expected Cultural Response: Cultural characteristics observed with added 0.5 grams of sulphadiazine per litre after an incubation i) Bacteria at 35-37°C for 18-24 hours ii) Fungal at 25-30°C for 24-48 hours iii) Bacteroides species anaerobically for 24-48 hours.

Sr. No.	Organisms	Results to be achieved	
		Inoculum (CFU)	Growth
1.	<i>Bacteroides fragilis ATCC 25285</i>	50 - 100	good-luxuriant
2.	<i>Candida albicans ATCC 10231</i>	50 - 100	good-luxuriant
3.	<i>Neisseria meningitidis ATCC 13090</i>	50 - 100	good-luxuriant
4.	<i>Streptococcus pneumonia ATCC 6303</i>	50 - 100	good-luxuriant
5.	<i>Streptococcus pyogenes ATCC 19615</i>	50 - 100	good-luxuriant

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

1. With liquid specimens, tubed media should be inoculated with 1-2 drops of the specimen using a sterile pipette.
2. Swab specimens may be inserted into broth after inoculation of plated media.
3. Liquid tubed media for anaerobic incubation should be reduced prior to incubation by placing the tubes, with caps loosened, under anaerobic conditions for 18-24 hours prior to use.
4. Alternatively, liquid media may be reduced immediately prior to use by boiling with caps loosened and cooling with tightened caps to room temperature before inoculation.

Results

1. Examine tubes at intervals for up to 7 days for growth, which is indicated by the presence of turbidity compared to an uninoculated control.
2. If growth appears, cultures should be examined by Gram stain and subcultured onto appropriate media; e.g., a Trypticase Soy Agar with 5% Sheep Blood and/or Chocolate Agar plate, Eosin Methylene Blue Agar, Levine, or MacConkey Agar plates.
3. If anaerobes are suspected, subcultures should be incubated under anaerobic conditions.

Storage

Store the sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration

Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.





PRODUCT SPECIFICATION SHEET

Limitations of the Procedure

1. For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification.
2. Consult appropriate texts for detailed information and recommended procedures.

Packaging

Product Name : Brain Heart Infusion w/ PABA.

Product Code : DM1476

Available Pack sizes : 500gm

References

1. MacFaddin J. F., 1985, Media for the Isolation-Cultivation-Identification- Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore
2. Murray P. R., Baron E. J., Jorgensen J. H., Pfaller M. A., Tenover F. C., Tenover R. H., (Eds.), 8th (Eds.), 2003, Manual of Clinical Microbiology, ASM, Washington, D.C.
3. Mirick G. S., 1943, Exp. Med., 78:255

Further Information

For further information please contact your local MICROMASTER Representative.



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