Instructions For Use
ENGLISH

Cary Blair Transport Medium

Semisolid medium for collection, transport and preservation of micoorganisms.

DESCRIPTION

Cary Blair Transport Medium is used for transportation and preservation of clinical specimens, primarily faecal and rectal samples.

This medium has demonstrated its effectiveness in recovery of various microorganisms like *Vibrio parahaemolyticus* and species of *Salmonella*, *Shigella* and *Yersinia*.

TYPICAL FORMULA*	(g/litre)
Sodium Thioglycollate	1.5
Disodium Phosphate	1.1
Calcium Chloride	0.09
Sodium Chloride	5.0
Agar	5.0
Final pH 8.4 ± 0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance criteria.

METHOD PRINCIPLE

The low nutrient content is effective in maintaining the viability of microorganisms without significant increase in growth. Sodium thioglycollate is a reducing agent. Disodium phosphate acts as buffer. Calcium chloride and sodium Chloride provide essential ions that help maintain the osmotic balance of the medium while controlling permeability of bacterial cells. Agar is the solidifying agent. The high pH is an aid for recovery of *Vibrio* spp.

PREPARATION

Dehydrated medium	Suspend 12.7 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil and shake until completely dissolved. Cool to 45-50°C, mix well avoiding foam formation and distribute into screw-cap tubes[1]. Sterilize by steaming with caps loosened at 100°C for 15 minutes. DO NOT AUTOCLAVE.
Medium in bottles	Melt the content of the bottle in a water bath at 100°C (loosing the cap partially removed) until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into screw-cap tubes[1].

Notes:

1. Sufficient volume of medium must be dispensed into containers so that swabs will be covered completely.
2. Store ready-to-use tubes at 2-8°C, or other validated temperature, until used. It is responsibility of the individual laboratory to establish storage temperature and expiration date of the medium in its final containers.

TEST PROCEDURE

1. Allow tubes to come to room temperature.
2. **a) Swab specimen:** Immerse swab into the medium and cut off swab shaft.
   b) Stool specimen: Place approximately one gram of the faecal specimen into the medium and agitate to permit adequate mixing of the specimen with the transport medium.
3. Replace cap, tighten and label with appropriate patient information.
4. Transport the specimen to the laboratory for processing with minimal delay. Follow established laboratory procedures during transport and prior to processing (e.g. specimen should be maintained at 2-8°C during shipment if recovery of certain enteric pathogens such as *Shigella* and *Campylobacter* is required).
5. Mix the specimen thoroughly prior to inoculation of appropriate media.

INTERPRETING RESULTS

This medium serves as a vehicle for maintaining the viability of enteric bacterial pathogens during transport and storage.

APPEARANCE OF THE MEDIUM

Dehydrated medium: free-flowing, homogeneous, light beige.
Prepared medium: semisolid, opalescent, colourless to whitish.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed. Store bottles at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

Dehydrated medium: 4 years.
Bottles: 2 years.

QUALITY CONTROL

To check the performance of the medium the following microbial strains can be used.

Strain		Inoculum	Incubation	Growth
Shigella flexneri	ATCC® 12022	10^4-10^6 CFU	20-25°C / 48 h	Recovered on subculture
Salmonella Typhimurium	ATCC® 14028			Recovered on subculture
Vibrio parahaemolyticus	ATCC® 17802			Recovered on subculture

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for *in vitro* diagnostic use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

1. Murray P.R., E.J. Baron, J.H. Jorgensen, M.L. Landry and M.A. Pfaller ed. (2007) Manual of clinical microbiology, 9th ed. American Society for Microbiology, Washington, D.C.
2. Neuman, D.A., M.W. Benenson, E. Hubster, and Thi Nhu Tuan (1971) N. Am. J. Clin. Path. 57:33-34.
3. Cary S.G., M.S. Matthew, M.H. Fusillo, and C. Harkins (1965) Survival of *Shigella* and *Salmonella* in a new transport medium. Am. J. Clin. Pathol. 43:294-296.
4. Cary, S.G., and E.B. Blair (1964) New transport medium for shipment of clinical specimens. J. Bacteriol. 88:96-98.

The product is available in the various configurations listed below. There may be additional product ref. numbers as well. For an updated listing of available products, visit **liofilchem.com**

Product	Format	Packaging	Ref.
Cary Blair Transport Medium	Bottle	6 x 500 ml	470290
Cary Blair Transport Medium	Dehydrated medium	500 g of powder	611402
Cary Blair Transport Medium	Dehydrated medium	100 g of powder	621402

TABLE OF SYMBOLS

LOT Batch code	IVD *In vitro* Medical Diagnostic Device	Manufacturer	Use by	Fragile, handle with care
REF Catalogue number	Temperature limitation	Contains sufficient for <n> tests	Consult Instruction For Use	Do not reuse

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