

TM 415 – TRANSPORT MEDIUM W/O CHARCOAL (CARY-BLAIR MEDIUM BASE)

INTENDED USE

For collection and shipment of clinical specimen.

PRODUCT SUMMARY AND EXPLANATION

Transport Medium is a non-nutritive, chemically defined, semisolid, buffered medium. The sole purpose of this medium is to maintain the viability of organisms during the time from collection to examination of the specimen. Transport Medium should be essentially non-nutritive so that the test organisms do not increase in numbers during transport. Transport media were originally formulated by Stuart et al for carrying gonococcal specimens to the laboratory. Cary and Blair devised a new medium containing fewer nutrients, low oxidation-reduction potential and a high pH. Cary-Blair Medium w/o Charcoal is used for collection and transport of clinical specimens. It is also recommended by APHA and various authors for transport of specimens. Since this transport media has a high pH, viability of *Vibrio* cultures can be maintained for a longer duration. This medium also facilitates the recovery of *Salmonella* and *Shigella* species.

For collection of the specimen, use sterile cotton tipped swabs on wooden sticks. Push the swabs down to one third of the medium depth and cut the stick so that when the cap is screwed down, the swab is forced to the bottom of the medium. Tighten the cap firmly on the bottle. The specimen will be preserved and the viability of the organisms will be also maintained during transport, but over the time it will diminish. Therefore, direct inoculation of the specimen is advised. Some growth of accompanying contaminants may also occur during longer period of transit. The specimen should be inoculated into a proper medium as soon as possible.

COMPOSITION

Ingredients	Gms / Ltr
Disodium hydrogen phosphate	1.100
Sodium thioglycollate	1.500
Sodium chloride	5.000
Agar	5.000

PRINCIPLE

Cary-Blair Medium Base is prepared with minimal nutrients to facilitate survival of organisms without multiplication. Sodium thioglycollate provides a low oxidation-reduction potential. Alkaline pH of the medium minimizes bacterial destruction due to the formation of acid. Disodium hydrogen phosphate buffers the medium whereas sodium chloride maintains the osmotic equilibrium.

INSTRUCTION FOR USE

- Suspend 12.6 grams in 991 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Cool to 45-50°C and aseptically add 9 ml of 1% aqueous calcium chloride solution.
- Adjust pH to 8.4 if necessary. Distribute in 7 ml amounts in screw-capped tubes.
- Steam for 15 minutes and cool and tighten the caps.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured, slightly opalescent solution in tubes
pH (at 25°C) : 8.4±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Klebsiella aerogenes</i>	13048	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Klebsiella pneumoniae</i>	13883	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Neisseria meningitidis</i>	13090	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Salmonella</i> Typhimurium	14028	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Shigella flexneri</i>	12022	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Vibrio cholerae</i>	15748	50-100	Good-luxuriant	35-37°C	18-24 Hours
<i>Vibrio</i> <i>parahaemolyticus</i>	17802	50-100	Good-luxuriant	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 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.



