Puritan Selenite Broth Transport Medium

INTENDED USE

Puritan Selenite Broth Transport Medium is a selective enrichment medium used for the isolation of *Salmonella spp* and *Shigella spp*.

SUMMARY AND EXPLANATION

Salmonella is an important bacterial pathogen of foodborne illness, ranking just behind *C. jejuni* in its frequency.[1] Selenite Broth allows for enhanced growth of *Salmonella spp* in fecal specimens since the pathogen usually represents only a small percentage of the intestinal flora. The peptone provides essential nitrogenous and carbon compounds. Lactose and sodium phosphate maintain a neutral pH. Sodium selenite inhibits many species of gram-positive and gram-negative bacteria including enterococci and coliforms.[2]

FORMULATION PER LITER

Pancreatic Digest of Casein	Sodium Phosphate
Lactose	Demineralized Water
Sodium Selenite	

pH 7.0 ± 0.2 @ 25°C

PRECAUTIONS

For *in vitro* Diagnostics Use

- For single use only.
- Clinical specimens are considered biohazard and must be handled in manner to protect laboratory personnel.
- To be used by trained and qualified personnel using aseptic technique.
- Clinical samples may contain human pathogens including hepatitis virus and Human Immunodeficiency Virus. Institutional and universally recognized guidelines should be followed when handling items contaminated with blood and other body fluids.[3]
- Specimen vials and other contaminated materials must be sterilized by autoclave before discarding.
- Do not use if the vial is damaged or detected evidence of contamination, discoloration or leakage.
- Do not ingest the medium.
- Do not use beyond expiry date.

STORAGE

For optimum performance, store at 2-25°C. Avoid freezing and overheating.[4, 5]

MATERIALS SUPPLIED

Puritan Selenite Broth Transport Medium is available in product configurations indicated in the table below:

Item Number	Product Descriptions	Pack Size
SB-200	White polypropylene screw-cap tube with 2 mL of Selenite Broth Medium.	50 / Box
SB-500	White polypropylene screw-cap tube with 5 mL of Selenite Broth Medium.	50 / Box

LABORATORY SPECIMEN PROCESSING

Selenite Broth Collected Sample

1. Vortex the inoculated Selenite Broth transport medium for approximately 10 seconds.
2. Incubate inoculated Selenite Broth transport medium at 35 ± 2°C for 18-24 hours.
3. After incubation, streak the sample on a surface of specific agar plate by using a swab or removing aliquots of the Selenite Broth transport medium and inoculate on to the agar plate.

Fecal Opti-Swab® Collected Sample

1. Obtain tubes of Selenite Broth transport medium and unscrew cap.
2. Vortex the inoculated Fecal Opti-Swab for approximately 10 seconds.
3. Unscrew the cap and aseptically transfer the swab from the Fecal Opti-Swab to the Selenite Broth transport medium using sterile forceps.
4. Replace cap on both Fecal Opti-Swab and Selenite Broth.
5. Follow the procedures stated above for Selenite Broth Collected Sample.

SPECIMEN COLLECTION AND HANDLING

Specimens suitable for culture may be handled using various techniques. For detailed guidance, refer to appropriate references.[6, 7] Specimens should be obtained before antimicrobial agents have been administered.

QUALITY CONTROL

All batches of Puritan Selenite Broth Transport Medium are tested prior to release for pH and further evaluated for their ability to promote growth of *Salmonella spp* and *Shigella spp*, and suppress enterococci and coliforms over predefined time periods. All bacterial test isolates and testing procedures were established using criteria outlined in the Clinical and Laboratory Standards Institute's M22-A3 document and dehydrated media manufacturer recommendations where applicable.[2, 8]

Control	Incubation	Results
Salmonella enterica Serovar Typhimurium ATCC 14028	Aerobic, 18-24 hr @ 35-37°C	Growth
E. coli ATCC 25922	Aerobic, 18-24 hr @ 35-37°C	Inhibition
Shigella sonnei ATCC 9290	Aerobic, 18-24 hr @ 35-37°C	Growth

LIMITATIONS

Definitive identification of *Salmonella spp* and *Shigella spp* requires additional and/or serological tests. Refer to appropriate reference standards for further instructions.[6, 7]

REFERENCES

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