



SELENITE BROTH (DOUBLE PACK) (AS PER IP)

TM 418

INTENDED USE

Selenite F Broth is recommended as an enrichment medium for the isolation of Salmonella species from faeces, urine or other pathological materials in accordance with Indian Pharmacopoeia.

COMPOSITION

Ingredients	Gms/Ltr
Part A	
Peptone	5.000
Lactose	4.000
Sodium dihydrogen phosphate	0.500
Disodium hydrogen phosphate	9.500
Part B	
Sodium acid selenite(Sodium hydrogen selenite)	4.000

PRODUCT SUMMARY AND EXPLANATION

Selenite F Broth is recommended as an enrichment medium for the isolation of Salmonella species from faeces, urine or other pathological materials .The formulation corresponds to that of recommended by the Indian Pharmacopoeia for detection of Salmonella in foodstuffs, pharmaceuticals and pathological materials. Enrichment media are routinely employed for detection of pathogens in faecal specimens as the pathogens are present in a very small number in the intestinal flora. Selenite F Broth is useful for detecting Salmonella in the nonacute stages of illness when organisms occur in the test sample in low numbers and for epidemiological studies to enhance the detection of low number of organisms from asymptomatic or convalescent patients.

PRINCIPLE

Peptone provides nitrogenous substances and other essential ingredients. Lactose maintains the pH of medium. Selenite is reduced by bacterial growth and alkali is produced. An increase in pH lessens the toxicity of the selenite and results in overgrowth of other bacteria. The acid produced by bacteria due to lactose fermentation serves to maintain a neutral pH. Sodium phosphate maintains a stable pH and also lessens the toxicity of selenite. Do not incubate the broth longer than 24 hours as inhibitory effect of selenite decreases after 6 - 12 hours of incubation.



INSTRUCTIONS FOR USE

1. Dissolve 4.0 grams of Part B in 1000 ml distilled water.
2. Add 19.0 grams of Part A.
3. Mix well.
4. Warm to dissolve the medium completely and distribute in sterile test tubes.
5. Sterilize in a boiling water bath or free flowing steam for 30 minutes.

Note: Do not autoclave. Excessive heating is detrimental. Discard the prepared medium if large amount of selenite is reduced (indicated by red precipitate at the bottom of tube / bottle).

QUALITY CONTROL SPECIFICATIONS

Appearance Dehydrated powder:

Part A: Cream to yellow homogeneous free flowing powder

Part B: White to cream homogeneous free flowing powder

Appearance of the prepared medium: Light yellow coloured, clear to slightly opalescent solution of complete medium

pH (at 25°C): 7.1 ± 0.2

CULTURE RESPONSE

Cultural characteristics observed when subcultured on MacConkey Agar (TM 379) and incubation at 35 - 37°C for 18- 24 hours.

Organism	ATCC	Inoculum (CFU/ml)	Growth	Recovery
<i>Salmonella Typhi</i>	6539	10 ³	Good-luxuriant	Colourless
<i>Salmonella Typhimurium</i>	14028	10 ³	Good-luxuriant	Colourless
<i>Salmonella Choleraesuis</i>	12011	10 ³	Good-luxuriant	Colourless
<i>Escherichia coli</i>	25922	10 ³	None-poor	Pink with bile precipitate
<i>Escherichia coli</i>	8739	10 ³	None-poor	Pink with bile precipitate

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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

Manufacturer Address: Titan Biotech Limited, A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.

Authorized Representative: MedNet GmbH, Borkstrasse 10, 48163 Munster, Germany.



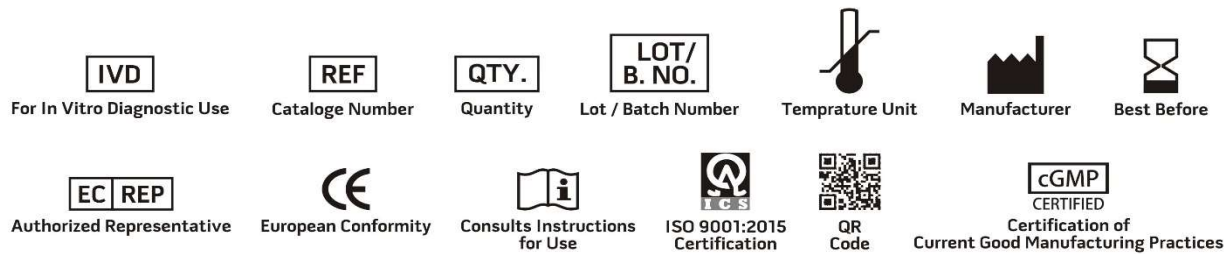
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PRODUCT DATA SHEET

provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

REFERENCES

1. The Indian Pharmacopoeia 2007, Govt. of India, The Controller of Publication, Delhi.
2. Murray PR, Baron EJ, Tenover JC, Tenover FC (editors) 2003, Manual of clinical Microbiology, 8th ed., ASM, Washington, D.C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.