

Salmonella Shigella Agar

Product No. CM206

Intended Use

Used for the selective isolation of *Salmonella spp.* and *Shigella spp.* (GB)

Specification 250 g

| Ingredients | (g/L) |
|---------------------|--------------|
| Peptone | 5.0 |
| Beef extract | 2.5 |
| Bile Salt No.3 | 1.0 |
| Lactose | 10 |
| Sodium citrate | 8.5 |
| Ferric citrate | 1.0 |
| Sodium thiosulphate | 8.5 |
| Neutral red | 0.025 |
| Brilliant green | 0.00033 |
| Agar | 15.0 |
| (pH 7.0 ± 0.2) | |

Additional Reagents

No

Principle and Interpretation

Peptone and beef extract provide carbon source, nitrogen source, vitamin and other nutrients required for bacterial growth. Lactose as a fermentable sugar. Bile salts No.3 and brilliant green inhibit the growth of gram-positive bacteria and most coliforms. The bacteria reduced sodium thiosulfate to produce S^{2-} , which combined with the iron ion in ferric citrate to form FeS, making the center of the colony black; Neutral red is the acid-base indicator, the lactose-producing colonies are red, and the non-lactose-producing colonies are colorless. In addition, bile salt precipitates around the colony to form a cholera precipitating ring due to acid production.

Directions

Suspend 60.0 g of the powder in 1 L of distilled water. Heat with frequent agitation and boil

to dissolve completely. DO NOT AUTOCLAVE. Cool to approximately 55°C and pour into sterile Petri dishes.

Precautions

No

Quality Control

| Microorganisms | Method | Incubation | Growing status | Characteristic colony morphology |
|--|-------------|---------------------|--------------------|---|
| <i>Salmonella typhimurium</i> ATCC 14028 | Qualitative | 36°C±1°C 18h-24h | Grown well | Colorless colonies with black centers |
| <i>Salmonella enteritidis</i> ATCC 13076 | | | Grown well | Colorless colonies with black centers |
| <i>Shigella flexneri</i> CMCC(B) 51572 | | | Grown well | Colorless colonies |
| <i>Escherichia coli</i> ATCC 25922 | | | Partial inhibition | Peachy colonies with cholic acid deposits |
| <i>Streptococcus faecalis</i> CICC 1.0130 | | | Inhibition | - |

Storage Conditions

Keep container tightly closed and store in a cool dry place.

Shelf Life

3 years.

Related Products

| Product No. | Product Name | Specification |
|-------------|--------------------------------|---------------|
| CM206-01 | Salmonella Shigella Agar | 1000 g |
| PB008A | Salmonella Shigella Agar Plate | 20 Plates |

For laboratory use in industry or R&D purpose. Not for drug, household or other uses.