

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.