

Technical Data Sheet

CE SS (Salmonella Shigella) Agar

Ordering number: 1.07667.0500

For the isolation of *salmonellae* and *shigellae* from faeces and other materials.

SS Agar is a differential medium of moderate selectivity in which gram-positive bacteria and coliform organisms are inhibited by bile salts, brilliant green and sodium citrate.

IVD in vitro diagnosticum - For professional use only

Mode of Action

Brilliant green, ox bile and high concentrations of thiosulfate and citrate largely inhibit the accompanying microbial flora. Sulfide production is detected by using thiosulfate and iron ions, the colonies turn black. The presence of *coliform* bacteria is established by detecting degradation of lactose to acid with the pH indicator neutral red.

Typical Composition

Peptones	10 g/l
Lactose	10 g/l
Ox bile	8.5 g/l
Sodium Citrate	10 g/l
Sodium Thiosulfate	8.5 g/l
Ammonium Iron(III) Citrate	1 g/l
Brilliant Green	0.0003 g/l
Neutral Red	0.025 g/l
Agar-Agar	12 g/l

Preparation

Suspend 60 g/l completely. Pour plates. **Do not autoclave.**

The appearance of the plates is clear and reddish-brown.

The pH at 25 °C is in the range of 6.8-7.2.

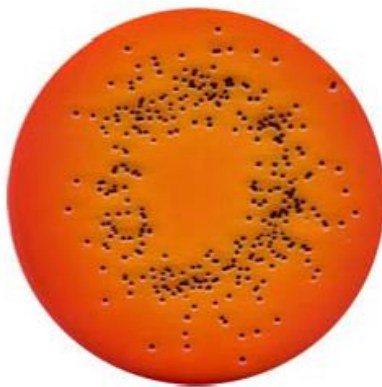
Experimental Procedure and Evaluation

Spread the sample or material from an enrichment culture on the surface of the culture medium.

Incubation: 18-24 h at 35 °C aerobically.

Lactose-negative colonies are colorless. Lactose-positive colonies are pink to red. Colonies of microorganisms producing H₂S have a black center.

Appearance of colonies	Microorganisms
Colourless, translucent	<i>Shigella</i> and some <i>Salmonella</i> species
Translucent with a black centre	<i>Proteus</i> and most <i>Salmonella</i> species
Pink to red	<i>Escherichia coli</i>
Colonies are larger than those of <i>Escherichia coli</i> , pink to whitish or cream-colored, opaque, mucoid	<i>Enterobacter aerogenes</i>



Salmonella enteritidis NCTC 5188



Shigella flexneri ATCC 29903

Storage

Usable up to the expiry date when stored dry and tightly closed at +15 to +25 °C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25 °C.

Specimen

e.g. Stool.

Clinical specimen collection, handling and processing. See general instructions of use.



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Quality Control

Control Strains	ATCC #	Incubation	Expected Results
<i>Shigella flexneri</i>	29903	24 h at 35 °C	Recovery ≥ 30 %, colorless colonies, yellowish-brown medium color
<i>Salmonella typhimurium</i>	14028	24 h at 35 °C	Recovery ≥ 30 %, colorless colonies, yellowish-brown medium color, black center
<i>Salmonella enteritidis</i>	15188 (NCTC #)	24 h at 35 °C	Recovery ≥ 30 %, colorless colonies, yellowish-brown medium color, black center
<i>Staphylococcus aureus</i>	25923	24 h at 35 °C	Recovery ≤ 0.01 %
<i>Bacillus cereus</i>	11778	24 h at 35 °C	Recovery ≤ 0.01 %
<i>Klebsiella pneumoniae</i>	13883	24 h at 35 °C	Pink colonies, pink-red medium color
<i>Proteus mirabilis</i>	14273	24 h at 35 °C	Colorless colonies, yellowish-brown medium color, black center
<i>Escherichia coli</i>	25922	24 h at 35 °C	Pink-red colonies, pink-red medium color, growth inhibited

Please refer to the actual batch related Certificate of Analysis.

Literature

American Public Health Association (1992): Compendium of methods for the microbiological examination of foods. 3rd edition.

Bopp, C. A., F. W. Brenner, P. I. Fields, J. G. Wells, and N. A. Stockbrine. 2003. *Escherichia*, *Shigella*, and *Salmonella*. In: Murray, P. R., E. J. Baron, J.H. Jorgensen, M. A. Pfaller, and R. H. Tenover (ed.). Manual of clinical microbiology, 8th ed. American Society for Microbiology, Washington, D.C.

Chapin, K.C., and T.-L. Lauderdale. 2003. Reagents, stains, and media: bacteriology. In: Murray, P. R., E. J. Baron, J.H. Jorgensen, M. A. Pfaller, and R. H. Tenover (ed.). Manual of clinical microbiology, 8th ed. American Society for Microbiology, Washington, D.C.

Leifson, E. 1935. New culture media based on sodium desoxycholate for the isolation of intestinal pathogens and for the enumeration of colon bacilli in milk and water. *Journal of Pathology and Bacteriology* 40:581-599.

MacFaddin, J.F. 1985. Media for the isolation – cultivation – maintenance of medical bacteria. Volume 1. Williams and Wilkins, Baltimore, London.

Ordering Information

Product	Cat. No.	Pack size
SS (Salmonella Shigella) Agar	1.07667.0500	500 g

Merck KGaA, 64271 Darmstadt, Germany
Fax: +49 (0) 61 51 / 72-60 80
mibio@merckgroup.com
www.merckmillipore.com/biomonitoring

Find contact information for your country at:
www.merckmillipore.com/offices
For Technical Service, please visit:
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