

SS Agar (Salmonella Shigella Agar)

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



In Vitro Diagnostic Medical Device –

For professional use only



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Merck KGaA, 64271 Darmstadt

Principle

Microbiological method.

General Information

The medium complies with the recommendations of the APHA for the examination of food (1992).

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 (g/litre)

Peptones 10.0; lactose 10.0; ox bile 8.5; sodium citrate 10.0; sodium thiosulfate 8.5; ammonium iron(III) citrate 1.0; brilliant green 0.0003; neutral red 0.025; agar-agar 12.0.

Preparation

Suspend 60 g/litre completely, pour plates.

■ **Do not autoclave.**

pH: 7.0 ± 0.2 at 25 °C.

The plates are clear and reddish-brown.

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.

See also General Instruction for Use „How to use Dehydrated Culture Media“

For MSDS, warnings and precautions see our website: www.merck-chemicals.com

Experimental Procedure and Evaluation

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

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

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

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

Literature

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

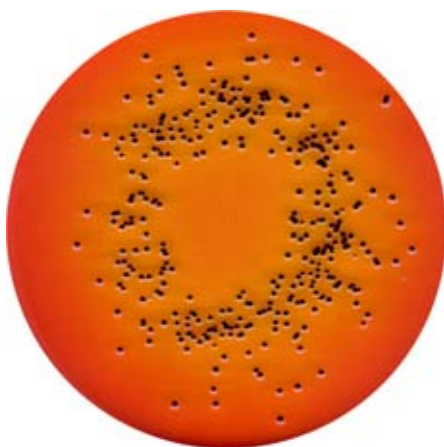
Ordering Information

Product	Ordering No.	Pack size
SS Agar (Salmonella Shigella Agar)	1.07667.0500	500 g
Merckoplate® SS Agar	1.15178.0001	1 x 20 plates

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Quality control (spiral plating method)

Test strains	Inoculum (cfu/ml)	Recovery rate %	Colony colour	Black centre	Colour change of medium
<i>Klebsiella pneumoniae</i> ATCC 13883	10^3 - 10^5	≥ 30	pink	-	pink-red (precipitate)
<i>Shigella flexneri</i> ATCC 29903	10^3 - 10^5	≥ 30	colourless	-	yellowish-brown
<i>Salmonella typhimurium</i> ATCC 14028	10^3 - 10^5	≥ 30	colourless	+	yellowish-brown
<i>Salmonella enteritidis</i> NCTC 5188	10^3 - 10^5	≥ 30	colourless	+	yellowish-brown
<i>Proteus mirabilis</i> ATCC 14273	10^3 - 10^5	≥ 30	colourless	+	yellowish-brown
<i>Escherichia coli</i> ATCC 25922	$> 10^5$	≤ 0.01	pink-red	-	pink-red (precipitate)
<i>Staphylococcus aureus</i> ATCC 25923	$> 10^5$	≤ 0.01			
<i>Bacillus cereus</i> ATCC 11778	$> 10^5$	≤ 0.01			



Salmonella enteritidis NCTC 5188



Shigella flexneri ATCC 29903