

S.I.M. MEDIUM

Differential medium for indole, motility and H₂S tests.

TYPICAL FORMULA	(g/l)
Peptone	6.1
Tryptone	20.0
Ferrous Ammonium Sulphate	0.2
Sodium Thiosulphate	0.2
Agar	3.5
Final pH = 7.3 ± 0.2 at 25 °C.	

DIRECTIONS

Suspend 30.0 g of powder in 1 liter of distilled or deionized water. Heat until completely dissolved. Dispense into final containers. Sterilize in autoclave at 121 °C for 15 minutes.

DESCRIPTION

S.I.M. MEDIUM is a medium for differentiation of enterobacteria on the basis of microorganisms motility, indole and hydrogen sulfide production.

TECHNIQUE

Using an inoculum from the growth of a pure culture at 18-24 hours, stab with an inoculating needle two-thirds into the medium. Incubate aerobically at 36 ± 1 °C for 18 hours or longer. Motility and H₂S production must be determined before the addition of reagents for determination of indole production (Kovac's Reagent, code 80270). Motility is observed as a diffuse growth outward from the stab line, H₂S production is shown by a blackening along the stab line. Indole production is shown by a red coloration after addition of 2-3 drops of Kovac's Reagent.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Colour: beige.

Prepared medium

Appearance: clear to slightly opalescent.

Colour: medium amber.

Incubation conditions: 36 ± 1 °C for 18-24 hours.

Microorganism	ATCC	Growth	H ₂ S	Motility	Indole
<i>Escherichia coli</i>	25922	good	-	+	+
<i>Salmonella typhimurium</i>	14028	good	+	+	-
<i>Salmonella typhi</i>	6539	good	+	+	-
<i>Shigella flexneri</i>	12022	good	-	-	-

PERFORMANCE AND LIMITATIONS

Reactions are not sufficient for speciate organisms.

Additional biochemical and serological tests are required for confirmation.



LIOFILCHEM s.r.l.

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STORAGE

The powder is very hygroscopic: store the powder at 10-30 °C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared tubes at 2-8 °C.

REFERENCES

1. Blazevic, D.J. (1968). Appl. Microbiol. **16**: 668.
2. Blushman, J.M., and Fulton, M. (1964). J. Bact. **88**: 1813.

PRESENTATION

Product	REF	
S.I.M. MEDIUM (16.6 l)	610181	500 g
S.I.M. MEDIUM (3.3 l)	620181	100 g

TABLE OF SYMBOLS

LOT Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	IVD In Vitro Diagnostic Medical Device
REF Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	 Keep away from heat source



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