

PRODUCT INFORMATION

SIM Medium

Cat. No. S19-110

DESCRIPTION

SIM Medium is a semisolid medium used for the determination of indole formation, sulfide production and motility of the Enterobacteriaceae, especially *Salmonella* and *Shigella*. Ferrous ammonium citrate and sodium thiosulfate are used to detect H₂S production. Casein peptone contains tryptophan, which is converted to indole and detected after incubation by the addition of Kovac's reagent, producing a red color. The medium is semi-solid due to a low concentration of agar and motility is easily seen by growth radiating from original stab.

FORMULA (g/L)

Enzymatic Digest of Casein	20.0 g	Sodium Thiosulfate	0.2 g
Peptic Digest of Animal Tissue	6.1 g	Agar	3.5 g
Ferric Ammonium Citrate	0.2 g		

Final pH: 7.3 ± 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Mix 30 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring to dissolve completely. Distribute and autoclave at 121°C for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and light beige to beige.
2. Visually the prepared medium is clear to trace hazy and light amber.
3. Expected cultural response after 18-24 hours at 35 °C.

ORGANISM	RESULT
<i>Escherichia coli</i> ATCC 25922	Good Growth – Indole (+)/Motility (+)/H ₂ S (-)
<i>Salmonella typhimurium</i> ATCC 14028	Good Growth – Indole (-)/Motility (+)/H ₂ S (+)
<i>Shigella flexneri</i> ATCC 12022	Good Growth – Indole (-)/Motility (-)/H ₂ S (-)



STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.

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