

# PRODUCT INFORMATION

Your Smarter Culture Media Choice



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## 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*. The SIM Medium is formulated to detect sulfide production, indole formation and production. Ferrous ammonium citrate and sodium thiosulfate are used to detect hydrogen sulfide production. H<sub>2</sub>S gas reacts with ferrous ammonium citrate to produce ferrous sulfide, a black precipitate. Casein peptone contains tryptophan, which is converted to indole. Indole is detected after incubation by the addition of Kovac's reagent which reacts with indole to produce 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\* per Liter:

Casein Digest Peptone.....	20.0g
Peptic Digest of Animal Tissue.....	6.1g
Ferrous Ammonium Citrate.....	0.2g
Sodium Thiosulfate.....	0.2g
Agar.....	3.5g

**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 and boil for one minute to dissolve completely. Distribute and autoclave at 121°C for 15 minutes.

### QUALITY CONTROL SPECIFICATIONS

1. The powder is homogeneous, 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:

*Escherichia coli* ATCC® 25922  
*Salmonella typhimurium* ATCC® 14028  
*Shigella flexneria* ATCC® 12022

Result	Indole	Motility	H <sub>2</sub> S
Growth	+	+	-
Growth	-	+	+
Growth	-	-	-

### 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 light beige to beige.