

# Triple Sugar Iron Agar

Cat. No. T20-107

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## DESCRIPTION

Triple Sugar Iron Agar is an agar medium used as a differential medium for the presumptive identification of enteric bacteria. The medium contains no growth inhibitors and most organisms grow, including gram positive organisms and yeasts. Phenol red indicates fermentation of the carbohydrates dextrose, sucrose and lactose. Ferric ammonium citrate is the hydrogen sulfide indicator, causing a blackening in the middle and upper portions of the slant.

### Formula\* per Liter:

Peptic Digest of Animal Tissue.....	5.0g
Casein Digest Peptone.....	5.0g
Yeast Enriched Peptone.....	10.0g
Dextrose.....	1.0g
Lactose.....	10.0g
Sucrose.....	10.0g
Sodium Chloride.....	5.0g
Phenol Red.....	0.025g
Ferric Ammonium Citrate.....	0.2g
Sodium Thiosulfate.....	0.3g
Agar.....	13.5g

**Final pH:** 7.3 ± 0.2 at 25°C

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

## PREPARATION

Mix 60 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. After autoclaving, allow for the medium to solidify in a slanted position.

## QUALITY CONTROL SPECIFICATIONS

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

### Organism:

*Escherichia coli* ATCC® 25922  
*Proteus mirabilis* ATCC® 12453  
*Pseudomonas aeruginosa* ATCC® 10145  
*Salmonella choleraesuis* ATCC® 13076  
*Shigella flexneria* ATCC® 12022

Result	Slant	Butt	Gas	H <sub>2</sub> S
Growth	A	A	+	-
Growth	K	A	-	+
Growth	K	K	-	-
Growth	K	N	-	+
Growth	K	A	-	-

## 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 pinkish beige.