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ProductInformation

SIMMONS CITRATE AGAR

Product Number **S3681**

Product Description
Simmons Citrate Agar is recommended for differentiation between fecal coli and members of the aerogenes group based on citrate utilization. Simmons Citrate Agar is used for the differentiation between *Enterobacteriaceae* and the members of aerogens group on the basis of citrate utilization as sole carbon source. Ammonium dihydrogen phosphate and sodium citrate serve as the sole nitrogen and carbon source respectively. Bromo thymol blue is the pH indicator. The microorganisms produce an alkaline reaction, which is indicated by the change in color from green to blue.

Components

Item	g/l
Magnesium Sulfate	0.20
Ammonium Dihydrogen Phosphate	1.00
Dipotassium Phosphate	1.00
Sodium Citrate	2.00
Sodium Chloride	5.00
Bromo Thymol Blue	0.08
Agar	15.00

Final pH (at 25°C) 6.8 ± 0.2

Precautions and Disclaimer
For laboratory use only. Not for drug, household or other uses.

Preparation Instructions
Suspend 24.28 grams of Simmons Citrate Agar in 1000 mls of distilled water. Boil to dissolve the medium completely. Mix well and distribute in test tubes or erlenmeyer flasks. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Storage and Stability
Store the dehydrated medium at 24°C and the prepared medium at 2-8° C.

Product Profile

Appearance	Yellow colored, homogeneous, free flowing powder
Gelling	Firm
Color and Clarity	Forest green colored, slightly opalescent gel forms as slants.
Cultural Response	Cultural characteristics observed after 18-24 hours at 35-37°C.

Organisms	**(ATCC)**	**Growth**	**Color of Medium**
Salmonella typhimurium	*(14028)*	good - luxuriant	blue
Salmonella typhi	*(6539)*	fair-good	green
Salmonella enteritidis	*(13076)*	good luxuriant	blue
Enterobacter aerogenes	*(13048)*	good-luxuriant	blue
Escherichia coli	*(25922)*	inhibited	green
Shigella dysenteriae	*(13313)*	inhibited	green

Organisms	Citrate Utilization
Salmonella typhimurium	**+**
Salmonella typhi	**-**
Salmonella enteritidis	**+**
Enterobacter aerogenes	**+**
Escherichia coli	**-**
Shigella dysenteriae	**-**

References
1. MacFaddin, J., Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, (1985). Vol. 1. Williams and Wilkins. Baltimore, Maryland.
2. American Type Culture Collection, Manassas, Va., U.S.A.