

Supplements

A. Composition of Blood Agar

Ingredients	g/l
Agar	12.0
D-Glucose	0.5
Meat extract	2.0
Peptone	10.0
Sodium chloride	5.0

pH = 7.3

B. Composition of Mueller-Hinton Agar

Ingredients	g/l
Agar	17.0
Beef dehydrated infusion	300.0
Casein Hydrolysate	17.5
Starch	1.5

pH = 7.3

C. Composition of MacConkey Agar

Ingredients	g/l
Agar	12.0
Bile salts	0.5
Lactose	10.0
Neutral red	0.015
Peptone	12.0
Sodium chloride	20.0

pH = 7.3

D. Composition of CLED Agar

Ingredients	g/l
Agar	15.0
Bromothymol blue	0.02
Lab-Lemco powder	3.0
Lactose	10.0
L-Cystine	0.128
Peptone	4.0
Tryptone	4.0

pH = 7.3

E. Simmon's Citrate Agar

Ingredients	g/L
Ammonium dihydrogen phosphate	0.2
Sodium citrate, tribasic	2.0
Magnesium sulphate	0.2
Bromothymol blue	0.08
Sodium ammonium phosphate	0.8
Sodium chloride	5.0
Agar	15.0

F. Motility Indole Ornithine Decarboxylase (MIO) Agar

Ingredients	g/L
Yeast extract	3.0
L-Ornithine HCL	5.0
Peptone	10.0
Bromocresol Purple	0.02
Tryptone	10.0
Dextrose	1.0
Agar	2.0

pH = 7.0 ± 0.2

G. Christensen's Urea Agar

Ingredients	g/L
Disodium phosphate	1.2
Peptone	1.0
Phenol red	0.012
Sodium chloride	5.0
Potassium di-hydrogen phosphate	0.8
Dextrose (Glucose)	1.0
Agar	15.0

pH = 6.8 ± 0.2

H. Triple Sugar Iron Agar (TSI)

Ingredients	g/L
Agar	12.0
Lab-Lemco' powder	3.0
Yeast extract	3.0
Glucose	1.0
Lactose	10.0
Sucrose	10.0
Sodium thiosulphate	0.3
Ferrous sulphate	0.2
Phenol red	0.05
Sodium chloride	5.0
Peptone	20.0

pH = 7.0 ± 0.2

Tests	Active ingredients	Qty mg/cup	Reactions/ enzymes	Results	
				Negative	Positive
ONPG	2-nitrophenyl- β D-galactopyranoside	0.223	β -galactosidase (Ortho- Nitrophenyl- β D-Galactopyranosidase)	Colorless	Yellow
GLU	D-glucose	1.9	Fermentation / oxidation (GLUcose)	Blue / blue-Green	Yellow / yellow-grey
ARA	L-arabinose	1.9	Fermentation / oxidation (ARAbinose)	Blue / blue-Green	Yellow
LDC	L-lysine	1.9	Lysine DeCarboxylases	Yellow	Red/orange
ODC	L-ornithine	1.9	Ornithine DeCarboxylases	Yellow	Red/orange
CIT	Trisodium citrate	0.756	CITrate utilization	Pale green / Yellow	Blue-green/blue
H ₂ S	Sodium thiosulphate	0.075	H ₂ S production	Colorless / Grayish	Black deposit / thin line
URE	Urea	0.76	UREase	Yellow	Red / orange
TDA	L-tryptophane	0.38	Tryptophane DeAminase	TDA / immediate	
				Yellow	Reddish brown
IND	L-tryptophane	0.19	INDole production	JAMES / immediate	
				Colorless green/ Yellow	Pale Pink
NO ₂	(GLU tube)	-	NO ₂ production	NIT 1 + NIT 2 / 2-5 min	
				Yellow	Red

Appendix-1: API 10S Identification Key

API-10S Color check

Negative Reaction



Positive Reaction

