

Iso-Sensitest Agar

Medium used for susceptibility test.

• CONTENTS (Liter)

Hydrolyzed Casein	11.0 g
Sodium Chloride	3.0 g
Peptones	3.0 g
Glucose	2.0 g
Soluble Starch	1.0 g
Disodium hydrogen phosphate	2.0 g
Sodium Acetate	1.0 g
Magnesium Glycerophosphate	0.2 g
Calcium Gluconate	0.1 g
Cobaltous Sulfate	0.001 g
Cupric Sulfate	0.001 g
Zinc Sulfate	0.001 g
Ferrous Sulfate	0.001 g
Manganous Chloride	0.002 g
Menadione	0.001 g
Cyanocobalamin	0.001 g
L-Cysteine HCl	0.02 g
L-Tryptophan	0.02 g
Pyridoxine	0.003 g
Pantothenate	0.003 g
Nicotinamide	0.003 g
Biotin	0.0003 g
Thiamine	0.00004 g
Adenine	0.01 g
Guanine	0.01 g
Xanthine	0.01 g
Uracil	0.01 g
Agar	15.0 g

Final pH = 7.4 ± 0.2 at 25°C.

• PROCEDURE

Suspend 38.4 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

• INTERPRETATION

Iso-Sensitest Agar is developed specifically for antimicrobial susceptibility tests. It allows the growth of the great majority of microorganisms without further supplementation. Some mutant strains, which are totally dependent on thymine and thymidine for their growth, will, however, not grow on this medium because those components are present at very low levels (as they are the natural antagonists of trimethoprim). Care must be taken to recognize these strains.

• TECHNIC

Transfer 4-5 colonies in an appropriate broth. Place it in a 37°C incubator until an opacity is obtained equivalent to the standard opacity of 0.5 on the MacFarland scale. Introduce a sterile swab into the inoculum and inoculate the agar passing 2 or 3 times onto the entire surface. Press the disk containing the antimicrobial on the agar surface. Incubate at $36 \pm 1^\circ\text{C}$ for 18 hours and then measure the inhibition zone with a compass. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: whitish.

Prepared medium

Appearance: clear.

Color: whitish.

Incubation conditions: $36 \pm 1^\circ\text{C}$ / 18 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	colorless
<i>Klebsiella pneumoniae</i>	13883	50-100	good	colorless
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	colorless
<i>Staphylococcus aureus</i>	25923	50-100	good	white
<i>Enterococcus faecalis</i>	19433	50-100	good	white
<i>Proteus mirabilis</i>	25933	50-100	good	colorless

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Ericsson H.M. and Sherris J.C. (1971). Acta. Pathol. Microbiol. Scand. Suppl. 217: 1-90.
2. Garrod, L.P., and Waterworth, P.M. (1971). J. Clin. Pathol. 24:779-789.

• PACKAGE

Cat. No : MB-I1265 Iso-Sensitest Agar	500 G
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