

MUELLER HINTON AGAR W/ %5 SHEEP BLOOD

INTENDED USE:

Mueller Hinton with %5 Sheep Blood is recommended for use in disk diffusion sensitivity testing of Streptococcus spp., including Streptococcus pneumoniae .

PRINCIPLE AND INTERPRETATION:

The basal medium for Mueller Hinton Agar with/ %5 Sheep Blood is Mueller Hinton Agar supplemented with 5% defibrinated sheep blood.

The major use of Mueller Hinton Agar is for antimicrobial susceptibility testing. It has become the standard medium for the Bauer-Kirby method and its performance is specified by the NCCLS.

Beef infusion and casein provide nitrogenous compounds, vitamins, carbon, sulphur and amino acids in Mueller Hinton Agar. Starch is added to absorb any toxic metabolites produced. Fresh, defibrinated sheep blood is added to support the growth of the fastidious microorganism, Streptococcus pneumoniae.

COMPOSITION:

Ingredients	Gr/Liter
Meat infusion	2 gr
Casein hydrolysate	17,5 gr
Starch	1,5 gr
Agar	17 gr
Defibrinated Sheep Blood	50 mL

***Formula adjusted, standardized to suit performance parameters

pH: 7,3 ± 0.2

PRECAUTIONS:

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

Inoculation: Surface, inoculum as described by N.C.C.L.S.

Incubation: As recommended by methodology for particular organisms and antibiotics by NCCLS.

QUALITY CONTROL:**1.Sterility Control:**

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

2.Physical/Chemical Control

pH: 7,3 ± 0,2

Appearance: Red

3.Microbiological Control: Cultural response on Mueller Hinton Agar w/ %5 Sheep Blood at 35± 2 °C after 24 and 48 hours incubation.

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Streptococcus pneumoniae ATCC 6305	10-100	Good	Good
Staphylococcus aureus ATCC 25923	10-100	Good	Good

LIMITATIONS OF THE PROCEDURE:

Incorrect inoculum concentration may produce incorrect results. Zones of inhibition may be too small if the inoculum is too heavy and they may be too large and difficult to measure if the inoculum is too light.

Zones of inhibition may vary when using Mueller Hinton Agar w/ %5 Sheep Blood. Oxacillin and Methicillin zones may be slightly smaller. Sheep blood can cause indistinct zones or a film of growth within the zones around sulfonamide and trimethoprim disks.4 Do not use nafcillin on blood containing media.

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label..Do not use beyond stated expiry date.

DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 02036

Packaging:Single wrap

Content: 10 plates/each package

REFERENCES:

- 1.Clinical and Laboratory Standards Institute (formerly NCCLS). 2006. Approved Standard: M2-A9. Performance standards for antimicrobial disk susceptibility tests, 9th ed. Clinical and Laboratory Standards Institute, Wayne, Pa.
2. Bauer, A.W., W.M.M. Kirby, J.C. Sherris, and M. Turck. 1966. Antibiotic susceptibility testing by a standardized single disk method. Am. J. Clin. Pathol.45:493-496.
3. Ryan, K.J., F.D. Schoenknecht, and W.M.M. Kirby. 1970. Disc sensitivity testing. Hospital Practice 5:91-100.
4. Ericsson, H.M., and J.C. Sherris. 1971. Antibiotic sensitivity testing. Report of an international collaborative study. Acta Pathol. Microbiol. Scand. Sec. B, Suppl. 217.
5. Clinical and Laboratory Standards Institute. 2006. Performance standards for antimicrobial susceptibility testing; fifteenth informational supplement, M100-S16 (M2). Clinical and Laboratory Standards Institute, Wayne, Pa.



Aseptic Sterile



Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature
Limitation



Do not reuse



Contains sufficient
for <n> tests



Look at user manual



Manufacturer



CE Mark