CM 22533 – COLUMBIA 5% BLOOD AGAR PLATE

INTENDED USE
Forisolationandcultivation of fastidious organisms.

PRODUCTSUMMARY AND EXPLANATION
Columbia BloodAgar Base was developedafterthe Columbia Agar formulation described by Ellner et al. from Columbia University. Columbia Blood Agar Base is specified in the Compendium of Methods for the Microbiological Examination of Foods.

COMPOSITION

Ingredients	Gms / Ltr
Peptone, special	23.000
Corn starch	1.000
Sodium chloride	5.000
Agar	15.000
Sheep blood	50.000ml

PRINCIPLE
The medium derives its superiorgrowth-supporting properties from the combination of two peptones, and yeast extract as a supplier of the B complexvitamins. Corn starch is included to absorb toxic by-products contained in the specimen and serves as an energy sourcefor organisms possessing alpha-amylases. Sheep blood allows detection of hemolytic reactions and supplies the X factor (heme) necessary for the growth of many pathogenic species. However it is devoid of V factor (Nicotinamide adeninedinucleotide) and hence *Haemophilus influenzae* which needs both the X and V factors, will not grow on this medium

INSTRUCTION FOR USE
Eitherstreak,inoculateorsurface spread the test inoculum aseptically on the plate.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Cherry red colour, opaque gel.
Quantity of Medium	:	25ml of medium in 90mm plates.
pH (at 25°C)	:	7.3± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION
Culturalcharacteristics observed after inoculation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Haemolysis	Incubation Temperature	Incubation Period
Streptococcus pneumoniae	6303	50-100	Luxuriant	>=70%	Alpha	35-37°C	24-48 hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	Beta	35-37°C	24-48 hours
Staphylococcus aureus	6538	50-100	Luxuriant	>=70%	Beta	35-37°C	24-48 hours
Enterococcus faecalis	29212	50-100	Luxuriant	>=70%	Beta	35-37°C	24-48 hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	None	35-37°C	24-48 hours
Salmonella typhi	6539	50-100	Luxuriant	>=70%	None	35-37°C	24-48 hours

PACKAGING:

Doublelayeredpacking containing 5 No. of plates with one silica gel desiccant bag packed inside it.

STORAGE

On receipt,store the plates at 2-8°C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

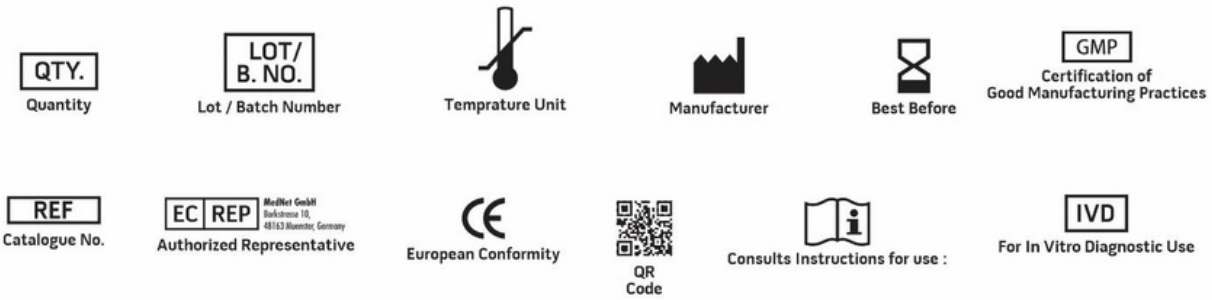
Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Ellener,P.C., C.J. Stoessel, E. Drakeford, and F. Vassi. A new culture medium for medical bacteriology. Am J. Clin Pathol. 45:502-504. (1966).
2. Vanderzant, C., and D. F. Splittstoesser (eds.). Compendium of methods for the microbiological examination of food, 3rd ed., p. 1113. American Public Health Association, Washington, D.C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.