CM 20655 – ENDO AGAR W/ NACL

INTENDED USE

For detection and isolation of pathogenic enteric bacilli.

PRODUCT SUMMARY AND EXPLANATION

EndoAgar was developed by Endo to differentiate gram-negative bacteria on the basis of lactose fermentation, while inhibiting gram-positive bacteria. Endo was successful in inhibiting gram-positive bacteria on this medium by the incorporationofsodium sulphite and basic fuchsin Endo Agar w/ NaCl is prescribed in the regulations for the execution of the GermanMeat Inspection Law.

COMPOSITION

Ingredients	Gms / Ltr
Special peptone	8.000
Lactose	10.000
Sodium chloride	3.000
Dipotassium hydrogen phosphate	2.000
Sodium sulphite	2.500
Basic Fuchsin	0.200
Agar	12.000

PRINCIPLE

The mediumconsists of peptone special which provide nitrogen, carbon, vitamins and minerals required for bacterial growth. Sodium sulphite and basic fuchsin inhibits most of the gram-positive bacteria. Lactose fermenting Escherichia coli and coliforms produce aldehyde and acid. The aldehyde liberates fuchsin from the fuchsin-sulphite complex and colonies of lactose fermenters appear dark red. Non-lactose fermenters show colourless colonies. With Escherichia coli, this reaction is very pronounced as the fuchsin crystallizes, exhibiting a permanent greenish metallic luster (fuchsin luster) to the colonies. Medium should be stored away from light to avoid photo-oxidation.

INSTRUCTION FOR USE

Dissolve 37.7gramsin 1000 ml purified / distilled water.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Ifthe solidified culture medium is somewhat too red, then to remove the colour, add a few drops (max.1ml/litre) of afreshly prepared 10% Sodium sulphite solution and boil. Cool to 45-50°C.
Mix well before pouring into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light pink to purple homogeneous free flowing powder.
Appearance of prepared medium	: Orangish pink coloured, clear to slightly opalescent gel with fine precipitate forms in Petri plates.
pH (at 25°C)	: 7.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Bacillus subtilis subsp. spizizenii	6633	>=10^3	Inhibited	0%	-	35-37°C	18-24 Hours
Klebsiella aerogenes	13048	50-100	Good-luxuriant	>=50%	Pink	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	None-poor	<=10%	Pink, small	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Good-luxuriant	>=50%	pink to rose red with metallic sheen	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Good-luxuriant	>=50%	Pink, mucoid	35-37°C	18-24 Hours
Proteus vulgaris	13315	50-100	Good-luxuriant	>=50%	Colourless to pale pink	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Good-luxuriant	>=50%	Colourless, irregular	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Good-luxuriant	>=50%	Colourless to pale pink	35-37°C	18-24 Hours
Shigella sonnei	25931	50-100	Good-luxuriant	>=50%	Colourless to pale pink	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	>=10^3	Inhibited	0%	-	35-37°C	18-24 Hours

Enterobacter cloacae	13047	50-100	Good	40-50%	Pink	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Good-luxuriant	>=50%	Colourless	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Good-luxuriant	>=50%	Colourless	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Good-luxuriant	>=50%	Colourless	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

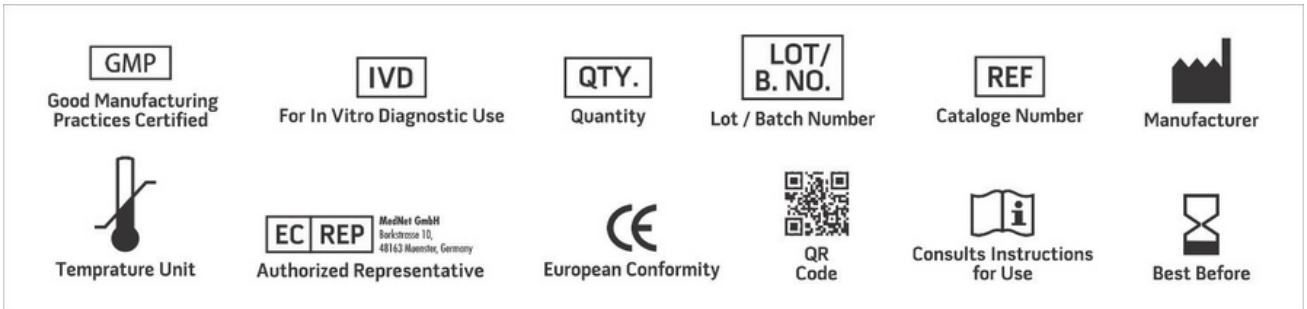
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Deutsches Fleishbeschaugesetz: Anlage Zu ß 20 Abs, 4: Vorschriflen über die bakteriologische Fleischuntersuchung.
2. Endo S., 1904, Centralbl. Bakt. I. Orig., 35:109.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.



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

*For LabUse Only