

CM 20850 - KANAMYCIN ESCULIN AZIDE BROTH

INTENDED USE

For selective isolation and identification of group D Streptococci in foodstuff.

PRODUCT SUMMARY AND EXPLANATION

Enterococci may be considered an essential part of the autochthonous microflora of humans and animals. Faecal streptococci bearing the group D Lancefield antigens are grouped as Enterococci. Lancefield Group D- Streptococci constituting the faecal Streptococci are contaminants of various food commodities, especially those of animal origin. Kanamycin Esculin Azide Broth is formulated as per Mossel et al to detect Enterococci in foodstuffs. Mossel et al used it for the dip slide technique for bacteriological monitoring of foods.

There is no universal medium that will isolate all strains of Enterococci. Unless a presumptive count is acceptable all isolates should have their identity confirmed with further tests.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	20.000
Yeast extract	5.000
Sodium chloride	5.000
Sodium citrate	1.000
Esculin	1.000
Ferric ammonium citrate	0.500
Sodium azide	0.150
Kanamycin sulphate	0.020

PRINCIPLE

Tryptone and yeast extract provides essential nutrients for Enterococci. Kanamycin sulphate and sodium azide are the selective inhibitory components. Esculin and ferric ammonium citrate together forms the indicator system to detect esculin-hydrolyzing Streptococci, which form black zones around the colonies. The black zones are produced from the formation of black iron phenolic compounds derived from esculin-hydrolysis products and ferrous ions.

INSTRUCTION FOR USE

- Dissolve 32.67 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into tubes or flask as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder : Cream to yellow w/greenish tinge homogeneous free flowing powder.
- Appearance of prepared medium : Medium amber coloured, clear solution in tubes.
- pH (at 25°C) : 7.0±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Esculin Hydrolysis	Incubation Temperature	Incubation Period
Enterococcus bovis	27960	50-100	Good-luxuriant	Positive reaction, blackening of medium	35-37°C	18-24 Hours
Enterococcus faecium	19434	50-100	Good-luxuriant	Positive reaction, blackening of medium	35-37°C	18-24 Hours
Escherichia coli	25922	$\geq 10^3$	Inhibited	-	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Good-luxuriant	Positive reaction, blackening of medium	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	$\geq 10^3$	Inhibited	-	35-37°C	18-24 Hours

PACKAGING:

Inpacksize of 100 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.

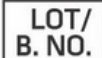
DISPOSAL

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

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
3. Mossel D. A. A., Bijker P. G. H. and Eelderink I., 1978, Arch. Lebensmittel - hyg., 29:121.
4. Mossel D. A. A. et al, 1978, In: 'Streptococci', Skinner F. A. and Quesnel L. B. (Eds.), SAB Symposium, Series No.7, Academic Press, London.
5. Mossel D. A. A. et al, 1976, Lab. Practice, 25:393.
6. Mossel D. A. A., Harrenwijn G. A. and Elzebroek B. J. M., 1973, UNICEF, Geneva.
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 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

*For LabUse Only

