

TM 748 - KANAMYCIN ESCULIN AZIDE AGAR BASE

INTENDED USE

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

PRODUCT SUMMARY AND EXPLANATION

Kanamycin Esculin Azide media are formulated as per Mossel et al to detect Enterococci in food stuffs. Mossel et al used it for the dip slide technique for bacteriological monitoring of foods. Mossel et al adopted the following procedure as - 1gm or 1ml mixed food is added to prechilled diluent (Tryptone water) and decimal dilutions are prepared. The decimal dilution is inoculated in Kanamycin Esculin Azide Broth and incubated at 35°C for 16 -24 hours.

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
Agar	12.000

PRINCIPLE

Tryptone, yeast extract provides nitrogenous and carbonaceous compounds, long chain amino acids, vitamins and other essential nutrients for Enterococci. Kanamycin sulphate and Sodium azide are the selective inhibitory components. Esculin and Ferric ammonium citrate together form indicator system to detect esculin - hydrolysing Streptococci and imparts black zones around the colonies.

INSTRUCTION FOR USE

- Dissolve 22.32 grams in 500 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add rehydrated contents of one vial of Kanamycin Sulphate Selective Supplement.
- Mix well before pouring into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to light brown coloured homogeneous free flowing powder.
Appearance of prepared medium	: Medium amber coloured clear to slightly opalescent gel with purplish tinge forms in Petri plates.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Esculin Hydrolysis	Incubation Temperature	Incubation Period
<i>Enterococcus bovis</i>	27960	50-100	Luxuriant	>=70%	Positive reaction, blackening of medium around the colony	35-37°C	18-24 Hours
<i>Enterococcus faecium</i>	19434	50-100	Luxuriant	>=70%	Positive reaction, blackening of medium around the colony	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	>=10 ³	Inhibited	0%	-	35-37°C	18-24 Hours

PACKAGING:

In pack size 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. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
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3. 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.
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5. Mossel D.A.A., et al., 1978, In: Streptococci., Skinner F.A. and Quesnel L. B. (ed.), SAB Symposium, series No.7, Academic Press, London.
6. Mossel D.A.A., et al, 1976, Lab. Practice, 25:393.
7. Mossel D.A.A., Harrenwijn G.A. and Elzebroek B.J.M., 1973, UNICEF Geneva.
8. Reuter E., 1985, Inter. J. Food Microbiol., 2:103.
9. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015. Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C
10. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP MedNet GmbH Buckstrasse 10, 49163 Muenster, Germany 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 Lab Use Only**
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