

TM 749 - KANAMYCIN ESCULIN AZIDE BROTH BASE

INTENDED USE

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

PRODUCT SUMMARY AND EXPLANATION

Kanamycin Esculin Azide Broth Base is recommended for isolation and identification of group D Streptococci in food stuffs. 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.

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		

PRINCIPLE

Tryptone and yeast extract provide essential growth nutrients for enterococci. Sodium azide inhibits gram negative organisms. Kanamycin has inhibitory effect on other gram-positive bacteria. Streptococci hydrolyse esculin to esculetin and dextrose. Esculetin and ferric ammonium citrate forms dark brown to black complex importing black colour to the broth.

INSTRUCTION FOR USE

- Dissolve 16.32 grams in 500 ml purified/distilled water.
- Heat if necessary 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 and dispense into sterile tubes or flasks or as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow coloured homogeneous free flowing powder.
Appearance of prepared medium	: Medium amber coloured clear solution without any precipitate.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.



PRODUCT DATA SHEET



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Esculin Hydrolysis	Incubation Temperature	Incubation Period
Enterococcus bovis	27960	50-100	Luxuriant	Positive reaction, blackening of medium	35-38°C	18-24 Hours
Enterococcus faecium	19434	50-100	Luxuriant	Positive reaction, blackening of medium	35-38°C	18-24 Hours
Escherichia coli	25922	>=10 ³	Inhibited	-	35-38°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.

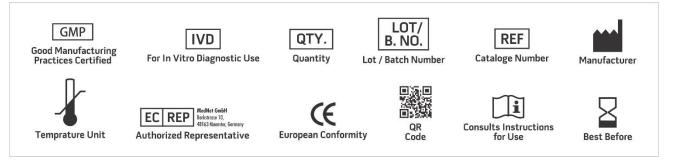
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. 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., Harrewijin, G.A and Elzebroek, Berdien, J.M (1973) UNICEF, Geneva.
- 4. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only

A- 902A, RIICO Industrial Area, Phase III, Bhiwadi-301019.





PRODUCT DATA SHEET

Revision: 08 Nov., 2019

